EA Engineering, Science, and Technology, Inc., PBC.
320 Gold Avenue SW, Suite 1300
Albuquerque, New Mexico 87102
Phone: (505) 224-9013

January 28, 2019

Ms. Allison Urbon
New Mexico Environment Department
Petroleum Storage Tank Bureau
121 Tijeras Avenue, NE Suite 1000
Albuquerque, NM, 87102-3400

RE: Limited Final Remediation Plan – Revision 2
Yocum's Texaco, 1823 E. Tucumcari Blvd., Tucumcari, New Mexico
Facility #: 2568 Release ID#: 2034 WPIDs #: 4001 Deliverable ID #: 4001-3

Dear Ms. Urbon:

EA Engineering, Science, and Technology, Inc., PBC (EA) is pleased to provide the attached revised Limited Final Remediation Plan for Yocum's Texaco, Tucumcari, New Mexico. NMED PSTB comments have been incorporated into this revised document.

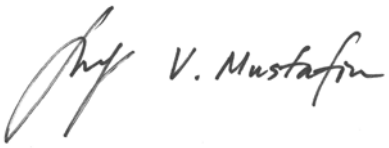
Please review and issue Deliverable Acceptance Letters to allow EA to submit a reimbursement claim for the completed work.

Any further revisions would require additional funds.

Please feel free to contact me, if you have any questions or comments.

Respectfully,

EA Engineering, Science, and Technology, Inc., PBC



Vener Mustafin, P.E.
Project Manager/Engineer

Cc: Ms. Katherine MacNeil, NMED PSTB
Mr. Jerry Dow

File

Attachments: LFRP

EA Engineering, Science,
and Technology, Inc. PBC

LIMITED FINAL REMEDIATION PLAN
REVISION 2
YOCUM'S TEXACO
1823 EAST TUCUMCARI BOULEVARD
TUCUMCARI, NEW MEXICO
PSTB FACILITY #2034
RELEASE ID #2568
CONTRACT #18 667 3200 0020
DELIVERABLE ID # 4001-3

Submitted to:
NMED PSTB

Submitted by:
EA Engineering, Science, and Technology, Inc., PBC
320 Gold Avenue SW, Suite 1300
Albuquerque, NM 87102

Distribution:

1 Copy	Ms. Allison Urbon, NMED PSTB
1 Copy	Ms. Katherine McNeil, NMED PSTB
1 Copy	Mr. Jerry Dow, Property Owner

January 2019

EA Project No. 6331801

TABLE OF CONTENTS

List of Tables

List of Appendices

1.0 INTRODUCTION

1.1. Contractual

EA Engineering, Science, and Technology, Inc. PBC (EA) has prepared this Limited Final Remediation Plan (LFRP) to inject hydrogen peroxide (HP) solution to remediate recalcitrant contamination at Yocum's Texaco, Tucumcari, New Mexico. This LFRP has been prepared in accordance with the Request for Bid Solicitation RID 2568 issued by New Mexico Environment Department Petroleum Storage Tank Bureau (NMED PSTB) under a One-Year Small Purchase Contract 18 667 3200 0020 and a Work Plan ID 4001 approved by the NMED PSTB on October 3, 2018. This document represent Deliverable ID 4001-3.

1.2. Site Description

Yocum's Texaco is a former Texaco fueling station located at 1832 East Tucumcari Boulevard in Tucumcari, New Mexico. The site had four 6,000-gallon gasoline and one used oil underground storage tanks (USTs), which were installed in 1963 removed in 1995. During removal, holes in the USTs were discovered. The volume of release was not known. Currently, the site has two dispenser islands that are not in service and a building that is being used as a mechanic's shop. No active remediation has been conducted at the site.

1.3. Site Geology and Hydrogeology

Soil at the site generally consists of sandy silt with interbedded silty clay that contains 40% to 70% of silt and clay (Appendix A). In October 2018, groundwater was present at a depth of approximately 15 - 16 feet below ground surface (bgs) (Table 1). Historically, groundwater was as deep as 18 feet bgs and as shallow as 11 – 12 feet bgs. The groundwater flow direction is typically to the northeast at a gradient of approximately 0.005 foot/foot.

1.4. Contaminants in Groundwater

Contaminants of concern (COCs) in groundwater include benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl-tert-butyl-ether (MTBE), ethylene dichloride (EDC), and naphthalenes (Table 2). In 1995, non-aqueous phase liquid (NAPL) was present in three wells MW-6 (0.12 foot), MW-7 (0.60 foot), and MW-8 (0.24 foot). However, NAPL has not been observed since 2006.

In recent years, MW-6 was the only well, in which COCs exceeded the regulatory standards. In October 2018, xylene concentration of 830 micrograms per liter (µg/L) and total naphthalene concentration of 31 µg/L were above the standards. COCs in all other wells were below standards in recent years; however, residual contamination in soil can be expected. There are no analytical results for dissolved metals at this site.

Total dissolved solids (TDS) concentrations varied between 1,340 milligrams per liter (mg/L) and 1,620 mg/L (Table 3).

2.0 REMEDIATION APPROACH

2.1. Remediation Approach and Monitoring During Injection

In October 2018, naphthalene and xylenes concentrations in MW-6 were above the standards. Evaluation of the MW-6 boring log indicated that contamination was encountered both in the vadose zone (5-14 feet bgs) and in the saturated zone (14-20 feet bgs). Therefore, to prevent desorption and infiltration of contamination into groundwater during high water table and rain events, treatment of both vadose and saturated zones was proposed.

Rationale for selecting HP for injection at Yocum's Texaco was based on effectiveness, established practice with the NMED PSTB, benign products of reaction, ease of injecting and distributing in the subsurface. Dosage details are provided below (Appendix B):

- Mass of contamination was estimated based on estimated impacted area, soil type, and PID readings.
- A conservative value of 10 parts per million by volume (ppmv) to 1 mg/kg TPH was used for silty sand (SM) to estimate the total mass of TPH in soil of approximately 145 pounds. The typically observed ratio for sandy soil is 10 to 100 ppmv to 1 mg/kg.
- Then, stoichiometric demand was used to estimate the mass of HP needed to oxidize the contamination.
- A safety factor of two (2) was then applied to arrive with six 55-gallons drums of 32% HP. For this application, the safety factor is a ratio of applied mass to that estimated to be required stoichiometrically. The safety factor was applied to account for variations in subsurface conditions and other demands. The factor was based on professional judgement.
- The total volume of 7% solution is approximately 1,600 gallons.
- Approximately 230 gallons will be injected into each borehole between 5 and 20 feet bgs.
- The resultant injection unit volume is approximately 16 gallons of solution per foot.
- Injection rate was estimated at approximately 2-5 gpm.
- Based on experience, the injection pressure is estimated to vary between 50 and 150 psig, depending on soil. The contractor will be required to have a pump capable of achieving pressure of 300 psig.
- The solution strength may be adjusted, if soil permeability impedes injection of the projected volume; the same amount of HP will be injected.

Approximately 4-7 days prior to injection, the NMED PSTB, NM GWQB, and Jerry Dow, site owner, will be notified of the scheduled activities.

JR Drilling, LLC, a New Mexico Licensed Driller will be subcontracted to perform the injection. EA will oversee and direct the activities.

At least 2 days prior to injection, the drilling contractor will request utility location service from One Call (NM 811). The area will be also visually inspected for potential unidentified utilities. The working area will be delineated around with barrels, marking tape, or other means to limit vehicular and pedestrian traffic. Unauthorized persons will not be allowed within the working area.

Schedule, scope, and execution of the activities will be coordinated with the site tenant and the site owner. Material data sheet for HP and HASP will be kept onsite and available to the owner, tenant, and personnel conducting work.

HP in 55-gallon plastic drums will be delivered to the site by a truck. Drums will be pre-labeled by the HP manufacturer at the time of production. Either a lift gate or a forklift will be used to unload the barrels. A forklift or a dolly will be used to move the drums within site limits. Barrels will be stored outside on the east side of the property at least 10 feet away from the building, as allowed by the site owner. Barrels will be stored in the upright position, closed, in a single row. Temporary fencing, direct custody, or security would be used to preclude access to the product.

All on-site personnel will follow the HASP provisions (Appendix C). Daily briefings will be held prior to starting work to discuss scope, approach, schedule, hazards, hospital location and route, and other aspects of conducting the work and maintaining site safety.

HP solution will be injected into subsurface using a direct push rig into up to seven soil borings spaced approximately 8 feet on-center. Solution will be injected in a top-down manner starting at 5 feet bgs every 2-3 feet to a depth of approximately 20 feet bgs. Spacing may be adjusted based on site conditions, injection rate, and short-circuiting between intervals. The injection locations are shown in Appendix D. Injection will be sequenced to skip an adjacent boring location to allow pressure to dissipate.

A mixing vessel will be filled with water and HP will be transferred into the vessel using a transfer pump to arrive with the desired solution. Volume of HP and volume of water in each batch will be measured and recorded (Appendix E). Personnel handling HP will wear protective suit, rubber over-gloves over nitrile gloves, over-boots, protective eye goggles, and face shield. Any spillage will be diluted and rinsed with water.

A transfer pump will be connected to the rod using flexible hose or pipe. Injection pressure and injection volume/rate will be measured and recorded using in-line pressure gauge and totalizing flowmeter. Parameters will be recorded in the field forms (Appendix E). If practicable, injection pressure will be maintained near the breakthrough pressure, at which flow of fluids first occurs. Pressure may be adjusted, to maintain sufficient and practicable flowrate.

In the nearby monitoring wells MW-5, MW-6, and MW-6R, water levels will be monitored with a water level meter or an interface probe. In addition, wells and area will be monitored for surfacing. If surfacing is noticed, injection will be stopped, injection pressure will be reduced and injection may be attempted again. If surfacing continues, rod will be pushed deeper and

injection will be performed at a deeper interval. If surfacing persists after injecting into more than two intervals, another borehole will be advanced several feet away from the one short-circuiting.

Upon completion, boring will be filled with bentonite pellets, bentonite grout, or neat cement grout. Surface will be restored by patching with concrete or cold-mix asphalt patches and all working areas will be cleaned.

Personal PPE and general trash will be collected and disposed off-site in a municipal waste container. Soil cuttings will not be generated due to the direct push method. HP drums will be rinsed with water and disposed at a municipal waste or a plastic recycling facility.

Upon completion of the injection, EA will prepare a Letter Report documenting completed activities.

2.2. Permits

On October 31, 2018, EA submitted to the NMED Groundwater Quality Bureau (GWQB) an Underground Injection Control (UIC) Discharge Permit (DP) (Appendix F).

On November 26, 2018, NMED GWQB issued a Determination of Administrative Completeness and Public Notice Requirements.

On November 29, 2018, Quay County Assessor's Office provided EA with a list of addresses within 1/3 mile from the site.

On December 5, 2018, public notices were mailed to all addressed provided by the Quay County Assessor's Office.

On December 7, 2018, EA posted onsite 2' x 3' Public Notice Posts in English and in Spanish.

On December 7, 2018, EA posted 8.5" x 11" flyers in English and in Spanish at the Tucumcari Public Library at 602. South 2nd Street, Tucumcari, NM, 88401.

On December 12, 2018, EA published the Public Notice in the Quay County Sun.

No other permits are required.

2.3. FRP Public Notice

Upon receipt of the FRP, NMED PSTB will publish the public notice for the FRP. FRP will be implemented after it is approved, public comments period has ended, and significant comments are addressed, if any.

2.4. Schedule

After submittal of the LFPR and 21 days after the second Public Notice and significant public comments are addressed, if any, injection could be implemented. The injection schedule will be coordinated with the subcontractor and HP provider and communicated to the site owner, tenant, and NMED PSTB. Injection is expected to take 2-3 days.

Several weeks after the injection, EA will conduct a post-injection groundwater monitoring event and report the findings to NMED PSTB in a one-page report. Post-injection event will include gauging and sampling of MW-5, MW-6, MW-6R, and MW-11. Groundwater samples will be analyzed for volatile organic compounds by EPA Method 8260.

All work will be completed within the period of performance of the Professional Service Contract #18 667 3200 0020, which ends on May 11, 2019.

TABLES

TABLE 1. SUMMARY OF FLUID GAUGING DATA
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

Monitoring Well	Date Measured	Casing Elevation feet above mean sea level	Depth to Water feet below top of casing	Groundwater Elevation feet above mean sea level
MW-5	11-Oct-18	4030.54	15.51	4,015.03
	10-Jan-18		14.04	4,016.50
	27-Dec-16		15.61	4,014.93
	26-Jul-16		15.95	4,014.59
	14-Aug-15		16.52	4,014.02
	19-Jan-15		17.53	4,013.01
	17-Apr-14		16.86	4,013.68
	28-Feb-13		16.03	4,014.51
	27-Dec-11		14.72	4,015.82
	20-May-09		11.43	4,019.11
	18-Nov-08		12.40	4,018.14
	15-May-08		12.47	4,018.07
	2-Feb-07		12.06	4,018.48
MW-6	11-Oct-18	4030.56	15.77	4,014.79
	10-Jan-18		14.31	4,016.25
	27-Dec-16		15.89	4,014.67
	26-Jul-16		16.22	4,014.34
	14-Aug-15		16.80	4,013.76
	19-Jan-15		Dry	
	17-Apr-14		17.11	4,013.45
	28-Feb-13		16.28	4,014.28
	28-Dec-11		14.99	4,015.57
	20-May-09		11.66	4,018.90
	18-Nov-08		12.71	4,017.85
	15-May-08		12.71	4,017.85
	2-Feb-07		12.30	4,018.26
	21-Sep-06		13.65	4,016.91
MW-6R	11-Oct-18	4030.60	15.78	4,014.82
	10-Jan-18		14.33	4,016.27
	27-Dec-16		15.89	4,014.71
	26-Jul-16		16.27	4,014.33
	14-Aug-15		16.82	4,013.78
MW-7	13-Aug-15	4036.77	Plugged & Abandoned	
	19-Jan-15		17.99	4,018.78
	17-Apr-14		17.41	4,019.36
	28-Feb-13		16.44	4,020.33
	28-Dec-11		15.15	4,021.62
	20-May-09		11.76	4,025.01
	18-Nov-08		12.85	4,023.92
	15-May-08		12.80	4,023.97
	2-Feb-07		12.44	4,024.33
	21-Sep-06		13.64	4,023.13
MW-7R	10-Jan-18	4029.71	13.68	4,016.03
	27-Dec-16		15.25	4,014.46
	26-Jul-16		15.66	4,014.05
	14-Aug-15		16.19	4,013.52

TABLE 1. SUMMARY OF FLUID GAUGING DATA
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

Monitoring Well	Date Measured	Casing Elevation feet above mean sea level	Depth to Water feet below top of casing	Groundwater Elevation feet above mean sea level
MW-8	13-Aug-15	4036.22	Plugged & Abandoned	
	19-Jan-15		17.40	4,018.82
	17-Apr-14		16.74	4,019.48
	28-Feb-13		15.91	4,020.31
	27-Dec-11		14.63	4,021.59
	20-May-09		11.28	4,024.94
	18-Nov-08		12.32	4,023.90
	15-May-08		12.39	4,023.83
	2-Feb-07		11.94	4,024.28
	21-Sep-06		13.15	4,023.07
MW-8R	10-Jan-18	4029.26	13.26	4,016.00
	27-Dec-16		14.82	4,014.44
	26-Jul-16		15.21	4,014.05
	14-Aug-15		15.78	4,013.48
MW-9	21-Sep-06	4038.23	Dry	
MW-9R	10-Jan-18	4029.79	13.33	4,016.46
	27-Dec-16		14.90	4,014.89
	26-Jul-16		15.43	4,014.36
	14-Aug-15		15.86	4,013.93
	19-Jan-15		16.79	4,013.00
	17-Apr-14		16.10	4,013.69
	28-Feb-13		15.28	4,014.51
	27-Dec-11		14.00	4,015.79
	20-May-09		10.68	4,019.11
	18-Nov-08		11.72	4,018.07
	15-May-08		11.75	4,018.04
	2-Feb-07		11.33	4,018.46
MW-10	21-Sep-06	4035.97	Dry	
MW-10R	10-Jan-18	4027.39	11.68	4,015.71
	27-Dec-16		13.27	4,014.12
	26-Jul-16		13.73	4,013.66
	14-Aug-15		14.19	4,013.20
	19-Jan-15		15.11	4,012.28
	17-Apr-14		14.42	4,012.97
	28-Feb-13		13.58	4,013.81
	27-Dec-11		12.32	4,015.07
	20-May-09		8.99	4,018.40
	18-Nov-08		10.11	4,017.28
	15-May-08		10.02	4,017.37
	2-Feb-07		9.61	4,017.78
MW-11	11-Oct-18	4030.14	15.48	4,014.66
	10-Jan-18		14.00	4,016.14
	27-Dec-16		15.57	4,014.57
	26-Jul-16		15.93	4,014.21
	14-Aug-15		16.51	4,013.63

TABLE 2. SUMARY OF GROUNDWATER SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	EDB	EDC	1-Methyl-naphthalene	2-Methyl-naphthalene	Naphthalene	Total Naphthalenes
	Standards	10	750	750	620	100	0.1	10	--			30
MW-5	10-11-18	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<4.0	<4.0	<2.0	<10
	27-Dec-16	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	26-Jul-16	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	12-Aug-15	<1.0	<1.0	18	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	19-Jan-15	<1.0	<1.0	1.9	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	17-Apr-14	<1.0	<1.0	11	7.2	1.4	<1.0	<1.0	--	--	--	3.7
	28-Feb-13	1.4	<1.0	62	48	<1.0	<1.0	<1.0	--	--	--	5.8
	27-Dec-11	2.0	<1.0	61	84	<1.0	<1.0	<1.0	--	--	--	8.6
	20-May-09	6.4	7.3	60	150	1.7	<1.0	<1.0	--	--	--	6.3
	18-Nov-08	8.4	12	67	310	1.9	<0.010	<1.0	--	--	--	4.9
	15-May-08	14	14	53	200	3.9	<0.010	<1.0	--	--	--	2.7
	1-Feb-07	7.3	17	40	160	<1.5	<0.010	<1.0	--	--	--	6.8
MW-6	11-Oct-18	8.5	<10	510	**830**	30	<10	<10	<40	<40	31	**31**
	10-Jan-18	9.8	<10	550	540	37	<10	<10	47	<40	130	**177**
	27-Dec-16	**21**	<10	**1,200**	**750**	85	<10	<10	--	--	--	**124**
	26-Jul-16	**21**	<20	510	**690**	72	<20	<20	--	--	--	<80
	12-Aug-15	NOT ENOUGH WATER TO SAMPLE										
	19-Jan-15	DRY - NOT SAMPLED										
	17-Apr-14	**95**	28	**3,500**	**6,000**	**280**	<20	<20	--	--	--	**160**
	28-Feb-13	**110**	12	**2,600**	**2,300**	**180**	<10	<10	--	--	--	**185**
	28-Dec-11	**29**	<10	350	**920**	93	<10	<10	--	--	--	<40
	20-May-09	**520**	220	**1,600**	**3,100**	**190**	<10	<10	--	--	--	**240**
	18-Nov-08	**170**	85	400	**1,800**	**120**	<0.010	<10	--	--	--	24
	15-May-08	**830**	120	**1,700**	**2,800**	**400**	<0.010	<50	--	--	--	<200
	1-Feb-07	**540**	64	360	**1,900**	**340**	<0.010	1.2	--	--	--	**102**
	21-Sep-06	**22**	19	21	240	**150**	<10	<10	--	--	--	<40
	29-Dec-95	**11,500**	**21,600**	**2,520**	**13,950**	---	---	---	--	--	--	---
MW-6R	11-Oct-18	<1.0	<1.0	21	76	<1.0	<1.0	<1.0	<4.0	<4.0	2.1	2.1
	10-Jan-18	<1.0	<1.0	57	180	1.3	<1.0	<1.0	<4.0	<4.0	8.0	8.0
	27-Dec-16	<1.0	1.1	72	220	1.6	<1.0	<1.0	--	--	--	3.6
	26-Jul-16	3.9	4.5	210	**620**	8.5	<1.0	<1.0	--	--	--	14.8
	13-Aug-15	3.3	34	65	360	<1.0	<1.0	<1.0	--	--	--	16.8

TABLE 2. SUMARY OF GROUNDWATER SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	EDB	EDC	1-Methyl-naphthalene	2-Methyl-naphthalene	Naphthalene	Total Naphthalenes
MW-7	13-Aug-15	WELL PLUGGED & ABANDONED										
	19-Jan-15	1.4	1.7	94	190	7.9	<1.0	<1.0	--	--	--	4.3
	17-Apr-14	2.5	<2.0	3.5	34	19	<2.0	<2.0	--	--	--	<8.0
	28-Feb-13	**29**	2.0	130	46	27	<1.0	<1.0	--	--	--	20
	28-Dec-11	**160**	7.5	67	90	46	<5.0	<5.0	--	--	--	<20
	20-May-09	**1,300**	340	660	**3,300**	**250**	<10	<10	--	--	--	**299**
	18-Nov-08	**600**	310	78	**1,300**	**240**	<0.010	<10	--	--	--	**113**
	15-May-08	**640**	360	210	**1,100**	**290**	<0.010	<50	--	--	--	<200
	1-Feb-07	**920**	610	200	**1,700**	**600**	<0.010	<10	--	--	--	**600**
	21-Sep-06	**1,500**	**2,200**	**760**	**3,500**	**600**	<100	<100	--	--	--	**820**
	29-Dec-95	**40,300**	**51,000**	**3,920**	**25,300**	---	---	---	--	--	--	---
MW-7R	10-Jan-18	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	<4.0	<4.0	<2.0	<10
	27-Dec-16	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	26-Jul-16	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	13-Aug-15	<1.0	<1.0	4.4	21	<1.0	<1.0	<1.0	--	--	--	8.4
MW-8	13-Aug-15	WELL PLUGGED & ABANDONED										
	19-Jan-15	DRY - NOT SAMPLED										
	17-Apr-14	<1.0	<1.0	<1.0	<1.5	2.4	<1.0	<1.0	--	--	--	<10
	28-Feb-13	<1.0	<1.0	<1.0	<1.5	12	<1.0	<1.0	--	--	--	<10
	27-Dec-11	<1.0	<1.0	<1.0	<1.5	12	<1.0	<1.0	--	--	--	<10
	20-May-09	**72**	2.3	89	67	**140**	<1.0	<1.0	--	--	--	27.5
	18-Nov-08	4.4	<1.0	5	2.2	24	<0.010	<1.0	--	--	--	<10
	15-May-08	15	<1.0	11	8.4	60	<0.010	<1.0	--	--	--	<10
	1-Feb-07	17	<1.0	12	16	99	<0.010	<1.0	--	--	--	2.9
	21-Sep-06	5.5	<1.0	4	<3.0	53	<1.0	<1.0	--	--	--	<10
	29-Dec-95	**4,130**	3,900	**778**	**3,560**	---	---	---	--	--	--	---
MW-8R	10-Jan-18	<1.0	<1.0	<1.0	<1.5	11	<1.0	<1.0	<4.0	<4.0	<2.0	<10
	27-Dec-16	<1.0	<1.0	<1.0	<1.5	10	<1.0	<1.0	--	--	--	<10
	26-Jul-16	<1.0	<1.0	<1.0	<1.5	31	<1.0	<1.0	--	--	--	<10
	13-Aug-15	<1.0	<1.0	<1.0	<1.5	11	<1.0	<1.0	--	--	--	<10
MW-9	WELL PLUGGED & ABANDONED											
	21-Sep-06	DRY - NOT SAMPLED										
	29-Dec-95	2.0	7.0	1	7.0	---	---	---	--	--	--	---

TABLE 2. SUMARY OF GROUNDWATER SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	EDB	EDC	1-Methyl-naphthalene	2-Methyl-naphthalene	Naphthalene	Total Naphthalenes
MW-9R	12-Aug-15	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	19-Jan-15	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	17-Apr-14	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	28-Feb-13	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	27-Dec-11	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	20-May-09	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	18-Nov-08	<1.0	<1.0	<1.0	<1.5	<1.0	<0.010	<1.0	--	--	--	<10
	15-May-08	<1.0	<1.0	<1.0	<1.5	<1.0	<0.010	<1.0	--	--	--	<10
	1-Feb-07	<1.0	<1.0	<1.0	<3.0	<1.5	<0.010	<1.0	--	--	--	<10
MW-10	WELL PLUGGED & ABANDONED											
	21-Sep-06	DRY - NOT SAMPLED										
	29-Dec-95	ND	2.0	ND	2.0	---	---	---	--	--	--	---
MW-10R	12-Aug-15	<2.0	<2.0	<2.0	<3.0	<2.0	<2.0	<2.0	--	--	--	<8.0
	19-Jan-15	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	17-Apr-14	<2.0	<2.0	<2.0	<3.0	<2.0	<2.0	<2.0	--	--	--	<8.0
	28-Feb-13	<2.0	<2.0	<2.0	<3.0	<2.0	<2.0	<2.0	--	--	--	<8.0
	27-Dec-11	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	20-May-09	<1.0	<1.0	<1.0	<1.5	<1.0	<1.0	<1.0	--	--	--	<10
	18-Nov-08	<1.0	<1.0	<1.0	<1.5	<1.0	<0.010	<1.0	--	--	--	<10
	15-May-08	<1.0	<1.0	<1.0	<1.5	<1.0	<0.010	<1.0	--	--	--	<10
	1-Feb-07	<1.0	<1.0	<1.0	<3.0	<1.5	<0.010	<1.0	--	--	--	<10
MW-11	11-Oct-18	<1.0	<1.0	<1.0	<1.5	2.3	<1.0	<1.0	<4.0	<4.0	<2.0	<10
	10-Jan-18	<1.0	<1.0	<1.0	<1.5	11	<1.0	<1.0	<4.0	<4.0	<2.0	<10
	27-Dec-16	<1.0	<1.0	<1.0	<1.5	3.1	<1.0	<1.0	--	--	--	<10
	26-Jul-16	1.5	<1.0	<1.0	<1.5	30	<1.0	<1.0	--	--	--	<10
	13-Aug-15	<1.0	<1.0	<1.0	<1.5	4.3	<1.0	<1.0	--	--	--	<10

NOTES:

All concentrations are in micrograms per liter

Bold values indicate concentrations above the standards

Standards New Mexico Water Quality Control Commission and Environmental Improvement Board Standards

EDB Ethylene dibromide

EDC Ethylene dichloride

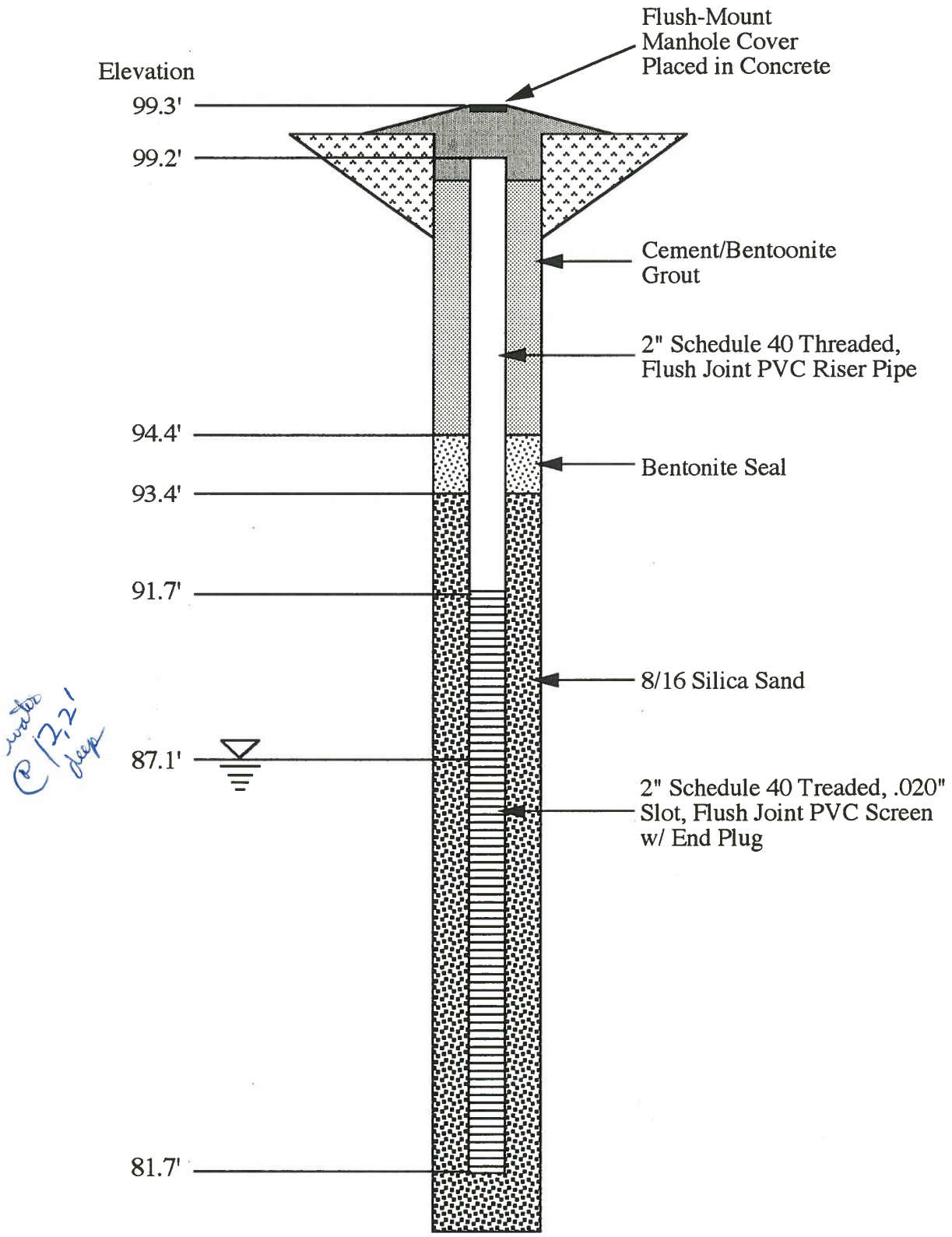
MTBE Methyl tertiary butyl ether

TABLE 3. TOTAL DISSOLVED SOLIDS
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

Monitoring Well ID	Total Dissolved Solids
MW-5	1,520
MW-6	1,550
MW-6R	1,340
MW-11	1,620
Minimum	***1,340***
Average	***1,474***
Maximum	***1,620***

Notes: Concentrations are in milligrams per liter

APPENDIX A – BORING LOGS AND CROSS SECTION



MW-6 - East of Dispenser Islands

EA Engineering, Science, and Technology, Inc., PBC

BORING/WELL CONSTRUCTION LOG

Project:	Yocum's Texaco	Project Number:	6289813 01
Drilling Company:	Terracon	Start Time/Date:	0800 8-11-15
Drilling Rig/Bit:	CME-75 HSA	Completion Time/Date:	0945 8-11-15
Driller:	Manny Dueñez	Final Depth:	27' bgs
Boring/Well ID:	MW-6R	Logged By:	D Werth Page 1 of 1

Sample Type	Recovery (inches)	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (soil type, color, density/consitency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
					1		
					2		
					3		
					4		
					5		
SS	2			SM	6	5'-7', silty sand, reddish brown (5YR 4/4), loose, moist, strong	
			1370		7	hydrocarbon odor	
					8		
					9		
					10		
SS	14	X		SM	11	10'-12', same as above, grey staining, trace clay, very strong	
		X	>4000		12	hydrocarbon odor	
					13		
					14		
					15		
SS	10			SM	16	15'-17', same as above, wet at 17'	
		X	151		17		
					18		
					19		
					20		
SS	20			ML	21	20'-22', silt, reddish brown (5YR 4/4), loose, saturated, trace very fine	
			0.0		22	sand, trace clay	
					23		
					24		
					25		
SS	20			ML	26	25'-27', same as above	
		X	7.3		27		
					28		
					29		
					30		
					31		
					32		
					33		
					34		
					35		
					36	0.010" slot screen: 12'-27'	
					37	10-20 silica sand: 10'-27'	
					38	3/8" bentonite chips: 2'-10'	
					39		
					40		
					41		
					42		
					43		
					44		
					45		

2" Sch 40 PVC

SS = Split Spoon CUT = Drill Cuttings

EA Engineering, Science, and Technology, Inc., PBC

BORING/WELL CONSTRUCTION LOG

Project:	Yocum's Texaco	Project Number:	6289813 01
Drilling Company:	Terracon	Start Time/Date:	1045 8-11-15
Drilling Rig/Bit:	CME-75 HSA	Completion Time/Date:	1300 8-11-15
Driller:	Manny Dueñez	Final Depth:	27' bgs
Boring/Well ID:	MW-7R	Logged By:	D Werth Page 1 of 1

Sample Type	Recovery (inches)	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (soil type, color, density/consitency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
					1		
					2		
					3		
					4		
					5		
SS	4				6	5'-7', poor recovery due to tank pit fill debris, only concrete	
			NM		7	chunks in SS	
					8		
					9		
					10		
SS	8			SM	11	10'-12', silty sand, reddish brown (5YR 4/4), medium dense, moist,	
		X	0.0		12	trace to little clay, some concrete debris	
					13		
					14		
					15		
SS	18			SM	16	15'-17', silty sand, reddish brown (5YR 4/4), loose, wet at 16.5', very	
		X	0.0		17	fine to fine sand	
					18		
					19		
					20		
SS	18			SM	21	20'-22', same as above, saturated, trace clay	
			0.0		22		
					23		
					24		
					25		
SS	20			SM	26	25'-27', same as above	
		X	0.0		27		
					28		
					29		
					30		
					31		
					32		
					33		
					34		
					35		
					36	0.010" slot screen: 12'-27'	
					37	10-20 silica sand: 10'-27'	
					38	3/8" bentonite chips: 2'-10'	
					39		
					40		
					41		
					42		
					43		
					44		
					45		

2" Sch 40 PVC

SS = Split Spoon CUT = Drill Cuttings

EA Engineering, Science, and Technology, Inc., PBC

BORING/WELL CONSTRUCTION LOG

Project:	Yocum's Texaco	Project Number:	6289813 01
Drilling Company:	Terracon	Start Time/Date:	1315 8-10-15
Drilling Rig/Bit:	CME-75 HSA	Completion Time/Date:	1530 8-10-15
Driller:	Manny Dueñez	Final Depth:	26' bgs (well) 27' bgs (SS)
Boring/Well ID:	MW-8R	Logged By:	D Werth Page 1 of 1

Sample Type	Recovery (inches)	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (soil type, color, density/consitency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
					1		
					2		
					3		
					4		
					5		
SS	14			SM	6	5'-7', silty sand, reddish brown (5YR 4/4), medium dense, dry, very	
			0.0		7	fine sand	
					8		
					9		
					10		
SS	14	X		SM	11	10'-12', same as above, moist, trace clay	
			0.0		12		
					13		
					14		
					15		
SS	22	X		SM	16	15'-17', same as above, saturated at 16'	
			0.0		17		
					18		
					19		
					20		
SS	24			ML	21	20'-22', clayey silt, reddish brown (5YR 4/4), loose, wet, trace very	
			0.0		22	fine sand	
					23		
					24		
					25		
SS	24			ML	26	25'-27', same as above	
		X	0.0		27		
					28		
					29		
					30		
					31		
					32		
					33		
					34		
					35		
					36	0.010" slot screen: 11'-26'	
					37	10-20 silica sand: 8'-26'	
					38	3/8" bentonite chips: 2'-8'	
					39		
					40		
					41		
					42		
					43		
					44		
					45		

2" Sch 40 PVC

SS = Split Spoon CUT = Drill Cuttings

EA Engineering, Science, and Technology, Inc., PBC

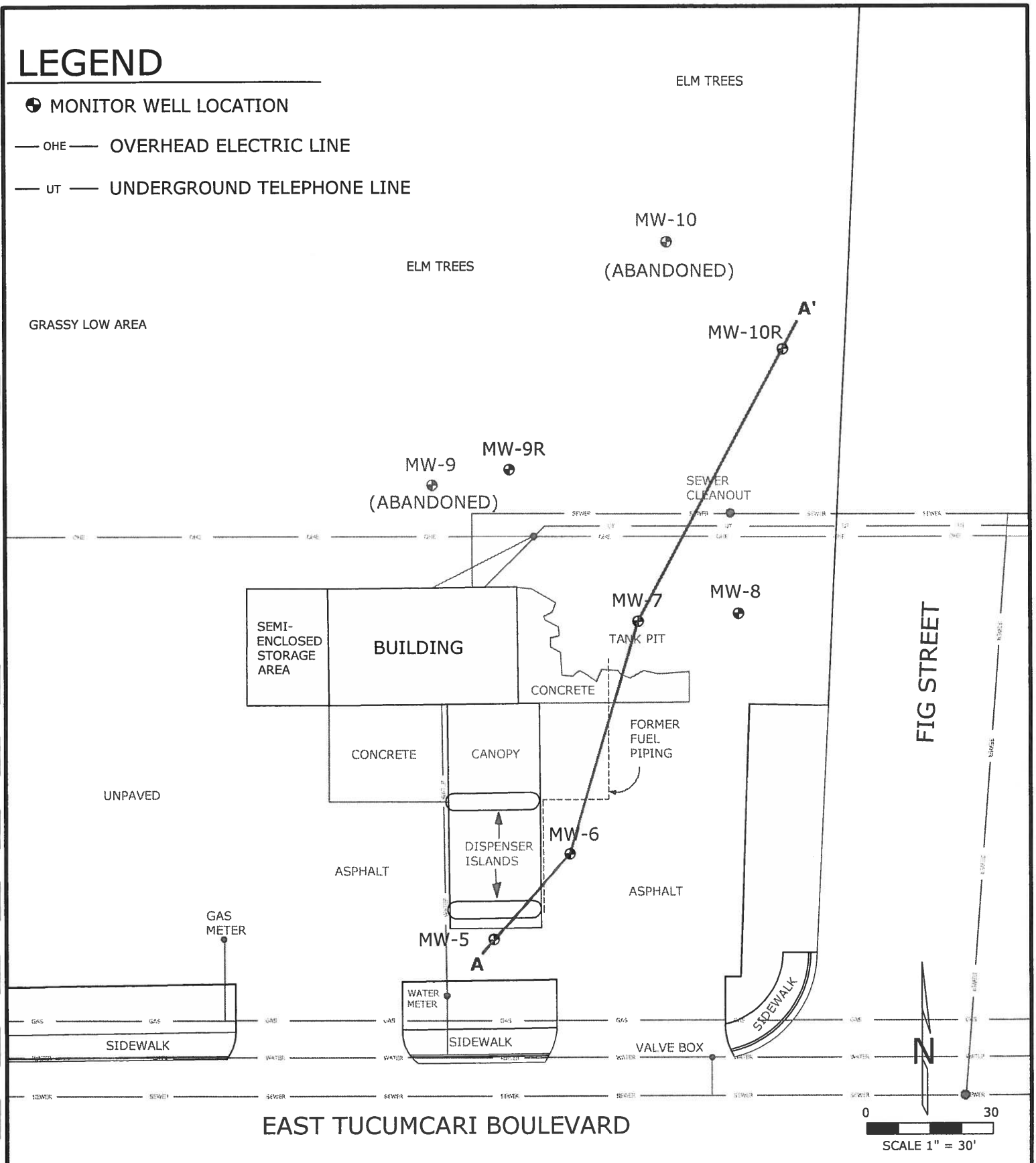
BORING/WELL CONSTRUCTION LOG

Project:	Yocum's Texaco	Project Number:	6289813 01
Drilling Company:	Terracon	Start Time/Date:	1545 8-10-15
Drilling Rig/Bit:	CME-75 HSA	Completion Time/Date:	1730 8-10-15
Driller:	Manny Dueñez	Final Depth:	27' bgs
Boring/Well ID:	MW-11	Logged By:	D Werth Page 1 of 1

Sample Type	Recovery (inches)	Sample Interval	PID Reading	USCS Soil Type	Depth, ft bgs	Soil Description (soil type, color, density/consitency, plasticity, moisture, grain size, angularity/minerology, other)	Boring and/or Well Details
					1		
					2		
					3		
					4		
					5		
SS	16			SM	6	5'-7', silty sand, reddish brown (5YR 4/4), loose to medium dense,	
			0.0		7	dry to moist, very fine to fine sand	
					8		
					9		
					10		
SS	16	X		SM	11	10'-12', same as above, slight grey staining at 12' with slight	
			2.8		12	hydrocaron odor	
					13		
					14		
					15		
SS	14			SM	16	15'-17', same as above, no staining, wet at 16.5'	
		X	5.6		17		
					18		
					19		
					20		
SS	16			ML	21	20'-22', silt, reddish brown (5YR 4/4), loose, wet, trace very	
			0.0		22	fine sand, trace clay, no odor or staining	
					23		
					24		
					25		
SS	16			SM	26	25'-27', same as 15'-17', saturated	
		X	0.0		27		
					28		
					29		
					30		
					31		
					32		
					33		
					34		
					35		
					36	0.010" slot screen: 12'-27'	
					37	10-20 silica sand: 10'-27'	
					38	3/8" bentonite chips: 2'-10'	
					39		
					40		
					41		
					42		
					43		
					44		
					45		

2" Sch 40 PVC

SS = Split Spoon CUT = Drill Cuttings



Haller & Associates, Inc.
467 Highway 66, Suite 2
Tijeras, NM 87059

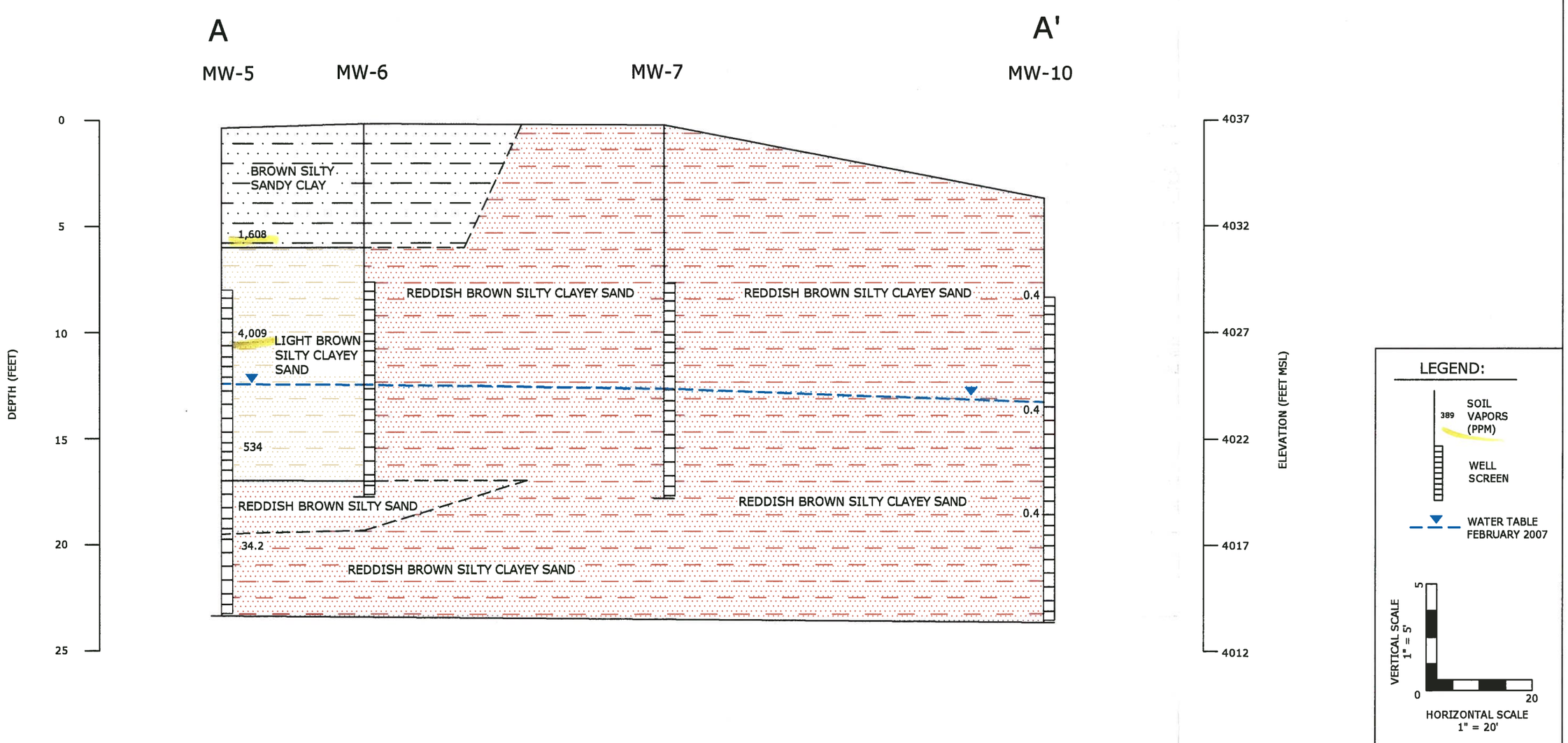
Hydrogeologic Evaluation & Remedial Solutions

SITE MAP

YOCUM'S TEXACO
1823 EAST TUCUMCARI BOULEVARD
TUCUMCARI, NEW MEXICO

FIGURE
2

Project Name: Yocum's Texaco - Additional Investigation | Project No.: 2652 | Draftsman: ECH | Date Drawn: 2/26/07



NOTE: DRILLING COMPLETED ON JANUARY 31, 2006

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CROSS SECTION A-A'

YOCUM'S TEXACO
1823 EAST TUCUMCARI BOULEVARD
TUCUMCARI, NEW MEXICO

FIGURE
8

Project Name: Yocum's Texaco MSA | Project No. 2652 | Draftsman: ECH | Date Drawn: 02/28/07

APPENDIX B - CALCULATION

Impacted Area	$A := 400\ ft^2$	Estimated - MW-6 and MW-6R
Impacted Vadose Zone Thickness	$Tv := 11\ ft$	From 5 to 16 feet bgs
Impacted Saturated Zone Thickness	$Ts := 4\ ft$	From 16 to 20 feet bgs
Depth to Water	$DTW := 16\ ft$	Oct 2018
Unit Weight of Soil	$Dsoil := 100\ \frac{lb}{ft^3}$	
Safety Factor	$SF := 2$	for oxidant application
PID to TPH Ratio	$Rpid := 10$	ppmv : TPH (mg/kg)for SM
Hydrogen Peroxide to Gasoilne	$Rhp := 3.73$	mass H2O2 to mass of gasoline

$$H_2O_2 = O_2 + 2H \qquad 12.5\ O_2 + C_8H_{18} = 8\ CO_2 + 9H_2O$$

Hydrogen Peroxide Density	$D := 1.2\ \frac{g}{cm^3} = 10\ \frac{lb}{gal}$	
Hydrogen Peroxide Concentration	$Chp := 32\ \%$	Delivered
Drum Volume	$Vdrum := 55\ gal$	
Soil Porosity	$n := 25\ \%$	
Injectate Solution	$IS := 7\ \%$	
Number of Injection Points	$N := 7$	

CALCULATIONS

TPH Concentraion in Vadose Zone	$Cv := \frac{(4000 + 1370)}{2 \cdot Rpid} \frac{mg}{kg} = 269 \frac{mg}{kg}$	
TPH Concentration in Saturated Zone	$Cs := \frac{(4000 + 150)}{2 \cdot Rpid} \frac{mg}{kg} = 207 \frac{mg}{kg}$	
Mass of TPH in Vadose Zone	$Mv := A \cdot Tv \cdot Dsoil \cdot Cv = 118\ lb$	
Mass of TPH in Saturated Zone	$Ms := A \cdot Ts \cdot Dsoil \cdot Cs = 33.2\ lb$	
Total Mass of TPH	$Mt := Mv + Ms = 151\ lb$	
Mass of Hydrogen Peroxide Needed	$Mhp := Mt \cdot Rhp = 564\ lb$	
Factored Mass of Hydrogen Peroxide	$Mhpf := Mhp \cdot SF = 1129\ lb$	
Mass of Hydrogen Peroxide in a Drum	$Mphd := Vdrum \cdot Chp \cdot D = 176\ lb$	
Number of Drums Required	$Nd := \frac{Mhpf}{Mphd} = 6$	
Pore Volume	$PV := A \cdot (Tv + Ts) \cdot n = 11221\ gal$	
Total Delivered Solution Volume	$Vsd := Nd \cdot Vdrum = 352\ gal$	
Injectate Volume	$IV := Vsd \cdot \frac{Chp}{IS} = 1611\ gal$	
Percent of Pore Volume	$PPV := \frac{IV}{PV} = 14\ \%$	reasonable distribution
Injectate Volume Per Point	$IVp := \frac{IV}{N} = 230\ gal$	
Injectate Volume Per Foot	$IVf := \frac{IVp}{(20\ ft - 5\ ft)} = 15 \frac{gal}{ft}$	between 5 and 20 feet bgs

APPENDIX C – HEALTH AND SAFETY PLAN

Site Name: Yocum's Texaco	**Site Contact:** Vener Mustafin	**Telephone:** (505) 296-1070
Location: 3623 East Tucumcari Blvd., Tucumcari, NM	**Client Contact:** Allison Urbon	**Telephone:** (505) 222-9553
EPA I.D. No.: N/A	**Prepared By:** Vener Mustafin	**Date:** January 2019
Project No.	**Date of Proposed Activities:** 2019	

Objectives:

All personnel working on this site are trained in accordance with 29 CFR 1910.120 and are currently active in a medical monitoring program to perform work on a hazardous waste site. The objective of this health and safety plan (HSP) is to list the site-specific hazards and the hazards controls to be used to ensure worker safety for the following activities:

- Inject hydrogen peroxide into select injection wells on site.

Site Type: *Check as many as applicable.*

- ☒ Active
- ☐ Inactive
- ☐ Secure
- ☒ Unsecure
- ☐ Industrial Waste
- ☐ Landfill
- ☐ Confined space **(must use long form)**
- ☐ Uncontrolled Waste **(must use long form)**
- ☐ Well field
- ☐ Underground storage tank
- ☐ Unknown **(must use long form)**
- ☐ Other *(Egg Farm)*

Site Description/History and Site Activities:

Yocum's Texaco is a former gasoline service station located at 1823 East Tucumcari Boulevard, Tucumcari, New Mexico. Currently, the site is being used as a mechanic's shop. Four 6,000-gallons gasoline USTs were installed in 1963 and removed in 1995. Hydrogen peroxide solution in water will be injected into subsurface using direct push rig from 5 feet bgs to approximately 20 feet bgs around MW-6 to remediate contamination in soil and groundwater.

Note: A site map, definitions, and additional information about this form are provided on the last three pages of this form.

Waste Management Practices:

PPE that cannot be decontaminated (i.e., chemical resistant suits, gloves, boot covers, respirator cartridges, etc.) will be placed in plastic trash bags. The disposal of investigation-derived waste will be in accordance with the U.S. Environmental Protection Agency, state, and federal requirements. Empty hydrogen peroxide drums will be rinsed out and transported the Tucumcari Landfill or a plastic recycling facility.

Waste Types:	☒ Liquid	☐ Solid	☐ Sludge	☐ Gas
Waste / Chemical Characteristics:	☒ Corrosive	☒ Oxidizer	☐ Flammable	
☒ Toxic	☐ Explosive	☒ Volatile	☐ Radioactive	
☒ Reactive	☐ Inert		☐ Other *(specify)* _____	

Chemical / Health Hazards of Concern:

- ☐ Explosion or fire hazard – monitor with combustible gas meter
- ☐ Oxygen deficiency – monitor with oxygen meter
- ☐ Landfill gases – monitor with methane and hydrogen sulfide meter
- ☐ Surface tanks
- ☐ Potential inhalation or skin absorption hazard that is immediately dangerous to life and health (IDLH) – **must use long form**
- ☐ Inorganic chemicals (nitrate and chloride)
- ☐ Organic chemicals (PCP)
- ☐ Petroleum Hydrocarbons (as TPH DRO)
- ☐ Underground storage tanks
- ☒ Other 55 – gallon drums of 30%, 35%, or 50% hydrogen peroxide

Explosion or Fire Potential:	☐ High	☐ Medium	☒ Low	☐ Unknown

Radiological Hazards of Concern: None known

☐ Ionizing radiation (Radioactive materials, X-ray) **(must use long form)**
☐ Non-ionizing radiation (ultraviolet, lasers)

Safety Hazards of Concern: (Based on anticipated clean-up operations)

☒ Heavy Equipment
☒ Pinch points
☒ Energized and rotating equipment (drill rig)
☐ Steam cleaning equipment
☐ Excavations
☐ Welding or torch cutting (Hot work)
☒ Sharp Objects
☒ Hazardous energy sources (electrical, hydraulic)
☒ Buried utilities
☒ Overhead utilities
☐ Suspended loads
☐ Buried drums
☐ Work over or near water
☐ Work from elevated platforms
☒ Manual Lifting
☒ Other *(specify)*
Heavy traffic

Physical Hazards of Concern:

☒ Heat stress
☒ Cold stress
☒ Slips, trips, falls
☐ Illumination
☐ Vibration
☒ Noise
☒ Solar (sunburn)
☐ Unstable or steep terrain
☐ Other *(specify) Traffic*_____

Biological Hazards of Concern:

☐ Poisonous plants (poison ivy, poison oak)
☐ Spiders (black widow or brown recluse spiders)
☐ Medical waste
☐ Snakes (rattlesnakes)
☐ Stinging insects (bees, wasps)
☐ Animals (feral dogs, mountain lions, etc.)
☐ Blood or other body fluids

Unexploded Ordnance:

☐ Unexploded Ordnance (UXO) **(must use long form)**
☐ Chemical Warfare Materials (CWM) **(must use long form)**
☐ Explosive ordnance waste (OEW) **(must use long form)**

Chemical Products EA Engineering Will Use or Store On Site: (Attach a Material Safety Data Sheet [MSDS] for each item.)

☒ Alconox® or Liquinox®

☐ Hydrochloric acid (HCl)

☐ Nitric Acid (HNO_3)

☐ Sodium hydroxide (NaOH)

☐ Sulfuric Acid (H_2SO_4)

☒ Other *(specify)* Hydrogen Peroxide

☐ Other *(specify)* _____

☐ Other *(specify)* _____

☐ Other *(specify)* _____

☐ Other *(specify)* _____

☐ Other *(specify)* _____

Chemicals Present at Site	Highest Observed Concentration* (groundwater)	PEL/TLV (specify ppm or mg/m^3)	IDLH Level (specify ppm or mg/m^3)	Symptoms and Effects of Acute Exposure	Photo-ionization Potential (eV)
Benzene	<10 µg/L	1 ppm (PEL)	500 ppm CARC	Severe irritant (skin, eye); reproductive toxin; CNS narcotic	9.24
Toluene	<10 µg/L	100 ppm	500 ppm	Severe irritant (skin, eye); reproductive toxin; CNS narcotic; fatigue, weakness, dizziness; headache	8.82
Ethylbenzene	510 µg/L	100 ppm	800 ppm	Severe irritant (skin, eye, mucous membranes); headache; narcosis	8.76
Xylenes (o, m, and p)	830 µg/L	100 ppm	900 ppm	Irritant (skin, eye, throat); reproductive toxin, CNS narcotic	8.44 – 8.56
Diesel Fuel	NA	NE	NE	Irritant (respiratory tract); possible carcinogen; possible mutagen	NE
Gasoline	NA	300 ppm	CARC	Irritant (skin, eye, mucous membrane); CNS narcotic	NE
Hydrogen peroxide	50% solution	1 ppm (PEL)	75ppm	Irritant (eyes, nose, throat); corneal ulcer, erythema, vesiculation skin, bleaching hair	NE

Notes: NIOSH Pocket Guide to Chemical Hazards, September 2005
* October 2018 Sampling Event

CARC = Carcinogenic
eV = Electron volt
GW = Ground water
IDLH = Immediately dangerous to life or health
mg/L = Milligram per liter
mg/m^3 = Milligram per cubic meter
NA = Not available
PEL = Permissible exposure limit
ppm = Part per million
TLV = Threshold limit value

Field Activities Covered Under This Plan:

Task Description	Type	Level of Protection: Primary	Level of Protection: Contingency	Date of Activities
1 Hydrogen Peroxide Solution Injection including Direct Push	☒ Intrusive ☐ Nonintrusive	☐ C ☒ D	☒ C ☐ B	2019
2 Groundwater Sampling	☒ Intrusive ☐ Nonintrusive	☐ C ☒ D	☐ C ☐ D	

Site Personnel and Responsibilities (include subcontractors):

Employee Name and Office Code	Task	Responsibilities
Vener Mustafin	1	Project Manager or Designated Leader: Directs project activities, makes site safety coordinator (SSC) aware of pertinent project developments and plans, and maintains communications with client as necessary.
Tyler Curley, Curtis Landers, Elliot Andelman, others	1	Site Safety Coordinator (SSC): Ensures that appropriate personal protective equipment (PPE) is available, enforces proper utilization of PPE by on-site personnel, suspends investigative work if he or she believes that site personnel are or may be exposed to an immediate health hazard, implements the health and safety plan, and reports any observed deviations from anticipated conditions described in the health and safety plan to the health and safety representative.
Tyler Curley, Curtis Landers, Elliot Andelman, others	1	Field Personnel: Complete tasks as directed by the program manager, field team leader, and SSC and follow all procedures and guidelines established in the EA Engineering Health and Safety Manual.

Protective Equipment: (Indicate type or material as necessary for each task; attach additional sheets as necessary)

Task: ☒ 1 ☐ 1	Task: ☐ 1 ☒ 2
Level: ☒ D ☐ C	Level: ☐ C ☒ D
Level C as contingency (see note below)	☒ Primary ☐ Contingency

RESPIRATORY	PROTECTIVE CLOTHING	RESPIRATORY	PROTECTIVE CLOTHING
☐ Not needed	☐ Not needed	☒ Not needed	☐ Not needed
☒ APR: When handling 30%-50% Hydrogen Peroxide	☐ Tyvek® coveralls: _____	☐ APR: _____	☐ Tyvek® coveralls: _____
☒ Cartridge: Vapor, HEPA	☒ Saranex® coveralls: _____	☐ Cartridge: _____	☐ Saranex® coveralls: _____
☐ Escape mask: _____	☐ Coveralls: _____	☐ Escape mask: _____	☐ Coveralls: _____
☐ Other: _____	☐ Other: _____	☐ Other: _____	☐ Other: _____
HEAD AND EYE	**GLOVES**	**HEAD AND EYE**	**GLOVES**
☐ Not needed	☐ Not needed	☐ Not needed	☐ Not needed
☐ Safety glasses: _____	☐ Undergloves: _____	☒ Safety glasses: _____	☐ Undergloves: _____
☒ Face shield: _____	☒ Gloves: Nitrile	☐ Face shield: _____	☒ Gloves: Nitrile
☒ Goggles: _____	☒ Overgloves: _____	☐ Goggles: _____	☐ Overgloves: _____
☐ Hard hat: _____		☐ Hard hat: _____	
☒ Other: Face Shield		☐ Other: _____	
FIRST AID EQUIPMENT	**BOOTS**	**FIRST AID EQUIPMENT**	**BOOTS**
☐ Not needed	☐ Not needed	☐ Not needed	☐ Not needed
☒ Standard First Aid kit	☒ Work boots: Steel Toed	☒ Standard First Aid kit	☒ Work boots: _____
☒ Portable eyewash	☒ Overboots: _____	☒ Portable eyewash	☐ Overboots: _____
OTHER		**OTHER**	
☐ (specify): _____		☐ (specify): _____	

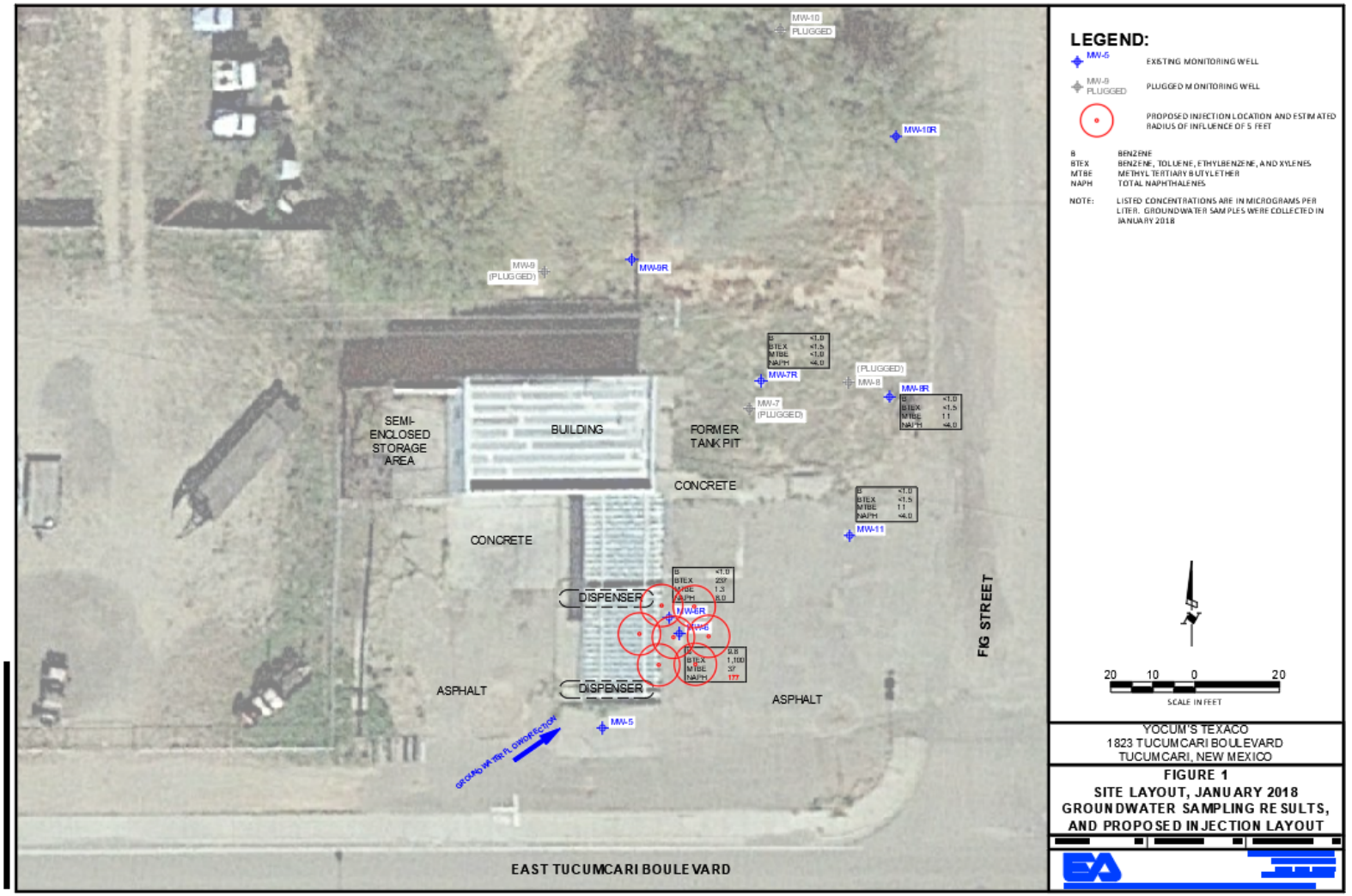
Note: For task 1, respirator will be worn when handling 30%-50% hydrogen peroxide and in vicinity of open drums.

APR = Air purifying respirator

Monitoring Equipment: (Specify instruments needed for each task; attach additional sheets as necessary)				
Instrument	Task	Instrument Reading	Action Guideline	Comments
Combustible gas indicator model:	☐ 1	0 to 10% LEL	No explosion hazard	☒ Not needed
	☐ 2	10 to 25% LEL	Potential explosion hazard; notify SSC	
		> 25% LEL	Explosion hazard; interrupt task; evacuate site, notify SSC	
O2 meter model:	☐ 1	> 23.5% O2	Potential fire hazard; evacuate site	☒ Not needed
	☐ 2	23.5 to 19.5% O2	Oxygen level normal	
		< 19.5% O2	Oxygen deficiency; interrupt task; evacuate site; notify SSC	
Photoionization detector model: ☐ 11.7 eV ☐ 10.6 eV ☐ 9.8 eV ☐ ____eV	☐ 1	>0 to 5 ppm above background	Level D	☒ Not needed
	☐ 2	>5 to 50 ppm above background	Level C	
		>50 ppm above background	Evacuate site; notify SSC	
Flame ionization detector model:	☐ 1	>0 to 5 ppm above background	Level D	☒ Not needed
	☐ 2	>5 to 50 ppm above background	Level C	
		>50 ppm above background	Evacuate site; notify SSC	
Detector tubes models:	☐ 1 ☐ 2	Specify:	Specify:	Note: This action level for upgrading the level of protection is one-half of the contaminant's PEL. If the PEL is reached, evacuate the site and notify the SSC. ☒ Not needed
Respirable dust monitor model:	☐ 1 ☐ 2	Specify:	Specify:	☒ Not needed
Other: (specify):	☐ 1 ☐ 2	Specify:	Specify:	☒ Not needed

Notes: eV = Electron volt PEL = Permissible exposure limit LEL = Lower explosive limit ppm = Part per million O_2 = Oxygen

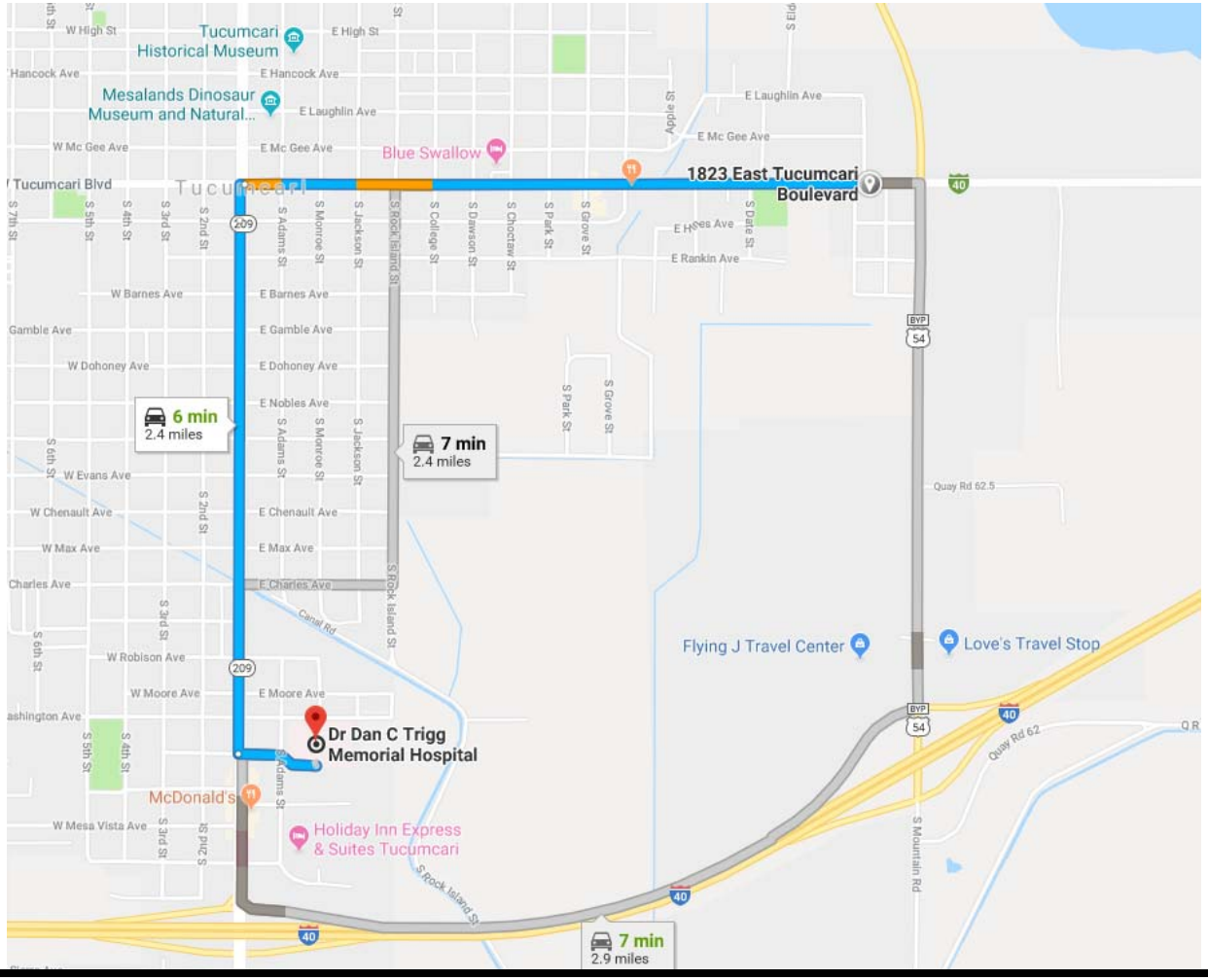
Site Map (if available):



Additional Comments:	**Emergency Contacts:**		**Telephone**
EA Engineering site workers will contain and absorb any chemicals used or transferred on site.	U.S. Coast Guard National Response Center		800/424-8802
	InfoTrac		800/535-5053
	Fire department		911
	Police department		911
	EA Engineering Personnel:		
	Corporate Human Resource Manager:	Michele Bailey	410/584-7000
	Corporate Health & Safety Manager:	Pete Garger	410/527-2412
	Office Health & Safety Coordinator:	Teri McMillan	505/259-6779
	Program Manager:	Teri McMillan	505/224-9013
	Site Safety Coordinator:	Tyler Curley	719-688-9558
Personnel Decontamination and Disposal Method:	**Medical Emergency:**		
Personnel will follow the U.S. Environmental Protection Agency's "Standard Operating Safety Guides" for decontamination procedures for Level C personal protection. The following decontamination stations should be set up in each decontamination zone: • All equipment will be decontaminated in a designated area All disposable equipment and gloves will be double-bagged or containerized in an acceptable manner and disposed of in accordance with local regulations.	Hospital Name:	Dr Dan Trigg Memorial Hospital	
	Hospital Address:	301 E. Miel De Luna Ave. Tucumcari, New Mexico	
	Hospital Telephone:	Emergency – 911 General – (575)- 461-7000	
	Ambulance Telephone:	911	
	Route to Hospital: (see next page for route map) (1) Head west on Tucumcari Blvd for 1.2 miles. (2) Turn left onto 1st Street and drive for 1.0 mile. (3) Turn left onto E. Miel De Luna Avenue. Drive 0.2 mile. Hospital will be on the left. Approximate drive time on this route is 6 minutes.		

Note: This page must be posted on site.

Hospital Route Map (if available):



Note: This page must be posted on site.

APPROVAL AND SIGN-OFF FORM

Project No. 6331801

I have read, understood, and agree with the information set forth in this Health and Safety Plan and will follow the direction of the Site Safety Coordinator as well as procedures and guidelines established in the EA Engineering Health and Safety Manual. I understand the training and medical requirements for conducting field work and have met these requirements.

Name	Signature	Date
Name	Signature	Date
Name	Signature	Date
Name	Signature	Date

APPROVALS: (Two Signatures Required)

Teri McMillan	Site Safety Coordinator	Date
	Health and Safety Coordinator	Date

DEFINITIONS

Intrusive - Work involving excavation to any depth, drilling, opening of monitoring wells, most sampling, and Geoprobe® work

Nonintrusive - Generally refers to site walk-throughs or field reconnaissance

Levels of Protection

Level D - Hard hat, safety boots, and glasses, may include protective clothing such as gloves, boot covers, and Tyvek® or Saranex® coveralls

Level C - Hard hat, safety boots, glasses, and air purifying respirators with appropriate cartridges, **PLUS** protective clothing such as gloves, boot covers, and Tyvek® or Saranex® coveralls

Emergency Contacts

InfoTrac - For issues related to incidents involving the transportation of hazardous chemicals; this hotline provides accident assistance 24 hours per day, 7 days per week

U.S. Coast Guard National Response Center - For issues related to spill containment, cleanup, and damage assessment; this hotline will direct spill information to the appropriate state or region

Health and Safety Plan Short Form

- Used for field projects of limited duration and with relatively limited activities; may be filled in with handwritten text
- Limitations:
  - No Level B or A work
  - Limited number of tasks
  - No confined space entry
  - No unexploded ordnance work or radiation hazard

SAFETY DATA SHEET
HYDROGEN PEROXIDE 35%

SDS # : 7722-84-1--35
Revision date: 2015-03-18
Format: NA
Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name HYDROGEN PEROXIDE 35%

Other means of identification

CAS-No 7722-84-1

Recommended use of the chemical and restrictions on use

Recommended Use:

Restrictions on Use: Use as recommended by the label.

Manufacturer/Supplier

PeroxyChem LLC
2005 Market Street
Suite 3200
Philadelphia, PA 19103
Phone: +1 267/ 422-2400 (General Information)
E-Mail: sdsinfo@peroxychem.com

PeroxyChem Canada
PG Pulp Mill Road
Prince George, BC V2N2S6
1+ 250/ 561-4200 (General Information)

Emergency telephone number

For leak, fire, spill or accident emergencies, call:
1 800 / 424 9300 (CHEMTREC - U.S.A.)
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)
1 613/ 996-6666 (CANUTEC - Canada)
1 303/ 389-1409 (Medical - U.S. - Call Collect)

1 281 / 474-8750 (Bayport, Texas Plant)
1 250 / 561-4221 (Prince George, BC, Canada Plant)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2 Sub-category B
Serious eye damage/eye irritation	Category 1

Specific target organ toxicity (single exposure)	Category 3
Oxidizing Liquids	Category 2

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Danger

Hazard Statements
H318 - Causes serious eye damage
H302 - Harmful if swallowed
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H315 - Causes skin irritation
H270 - May cause or intensify fire; oxidizer

Precautionary Statements - Prevention
P271 - Use only outdoors or in a well-ventilated area
P261 - Avoid breathing mist/vapors/spray
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P221 - Take any precaution to avoid mixing with combustibles/flammables
P220 - Keep/Store away from clothing/flammable materials/combustibles

Precautionary Statements - Response
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
P332 + P313 - If skin irritation occurs: Get medical advice/ attention
P362 + P364 - Take off all contaminated clothing and wash it before reuse
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a POISON CENTER or doctor if you feel unwell
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
P330 - Rinse mouth
P370 + P378 - In case of fire: Use water for extinction

Hazards not otherwise classified (HNOC)
No hazards not otherwise classified were identified.

Other Information

Keep container in a cool place out of direct sunlight. Store only in vented containers. Do not store on wooden pallets. Do not return unused material to its original container. Avoid contamination - Contamination could cause decomposition and generation of oxygen which may result in high pressure and possible container rupture. Empty drums should be triple rinsed with water before discarding.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula HO - OH

Chemical name	CAS-No	Weight %
Hydrogen peroxide	7722-84-1	35
Water	7732-18-5	65

Occupational exposure limits, if available, are listed in section 8

4. FIRST AID MEASURES

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Seek immediate medical attention/advice.

Skin Contact Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

Inhalation Move to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Ingestion Rinse mouth. Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed In case of accidental ingestion, necrosis may result from mucous membrane burns (mouth, esophagus and stomach). Oxygen rapid release may cause stomach swelling and hemorrhaging, which may product major, or even fatal, injury to organs if a large amount has been ingested.
In case of skin contact, may cause burns, erythema, blisters or even necrosis. Hydrogen Peroxide irritates respiratory system and, if inhaled, may cause inflammation and pulmonary edema. The effects may not be immediate.

Indication of immediate medical attention and special treatment needed, if necessary Hydrogen peroxide at these concentrations is a strong oxidant. Direct contact with the eye is likely to cause corneal damage especially if not washed immediately. Careful opthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered. Because of the likelihood of corrosive effects on the gastrointestinal tract after ingestion, and the unlikelihood of systemic effects, attemps at evacuating the stomach via emesis induction or gastric lavage should be avoided. There is a remote possibility, however, that a nasogastric or orogastric tube may be required for the reduction of severe distension due to gas formation.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Water. Do not use any other substance.

Specific Hazards Arising from the Chemical In closed unventilated containers, risk of rupture due to the increased pressure from decomposition. Contact with combustible material may cause fire

Hazardous Combustion Products On decomposition product releases oxygen which may intensify fire.

Explosion data
Sensitivity to Mechanical Impact Not sensitive.
Sensitivity to Static Discharge Not sensitive.

Protective equipment and precautions for firefighters Use water spray to cool fire exposed surfaces and protect personnel. Move containers from fire area if you can do it without risk. As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Isolate and post spill area. Keep people away from and upwind of spill/leak. Eliminate all sources of ignition and remove combustible materials.

Other Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in fire.

Environmental Precautions Do not flush into surface water or sanitary sewer system; if discharged into sewers or watercourses, dilute with plenty of water. See Section 12 for additional Ecological Information.

Methods for Containment Dike to collect large liquid spills. Stop leak and contain spill if this can be done safely. Small spillage: Dilute with large quantities of water.

Methods for cleaning up Flush area with flooding quantities of water. Hydrogen peroxide may be decomposed by adding sodium metabisulfite or sodium sulfite after diluting to about 5%.

7. HANDLING AND STORAGE

Handling Keep/Store away from clothing/ combustible materials. Wear personal protective equipment. Reference to other sections. Never return unused hydrogen peroxide to original container. Contamination may cause decomposition and generation of oxygen gas which could result in high pressures and possible container rupture. Empty drums should be triple rinsed with water before discarding. Utensils used for handling hydrogen peroxide should only be made of glass, stainless steel, aluminum or plastic. Pipes and equipment should be passivated before first use. Use only in well-ventilated areas. Hydrogen peroxide should be stored only in vented containers and transferred only in a prescribed manner.

Storage Keep containers in cool areas out of direct sunlight and away from combustibles. Provide mechanical general and/or local exhaust ventilation to prevent release of vapor or mist into work environment. Containers must be vented. Keep/store only in original container. Store rooms or warehouses should be made of non-combustible materials with impermeable floors. In case of release, spillage should flow to safe area. Containers should be visually inspected on a regular basis to detect any abnormalities (swollen drums, increases in temperature, etc.).

Incompatible products Combustible materials. Copper alloys, galvanized iron. Strong reducing agents. Heavy metals. Iron. Copper alloys. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Ingredients with workplace control parameters.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m^3	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m^3	Mexico: TWA 1 ppm Mexico: TWA 1.5 mg/m^3 Mexico: STEL 2 ppm Mexico: STEL 3 mg/m^3
Chemical name	**British Columbia**	**Quebec**	**Ontario TWAEV**	**Alberta**
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m^3	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m^3

Appropriate engineering controls

Engineering measures Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use chemical splash-type monogoggles and a full-face shield made of polycarbonate, acetate, polycarbonate/acetate, PETG or thermoplastic.

Skin and Body Protection For body protection wear impervious clothing such as an approved splash protective suit made of SBR rubber, PVC (PVC Outershell w/Polyester Substrate), Gore-Tex (Polyester trilaminate w/Gore-Tex), or a specialized HAZMAT Splash or Protective Suite (Level A, B, or C). For foot protection, wear approved boots made of NBR, PVC, Polyurethane, or neoprene. Overboots made of Latex or PVC, as well as firefighter boots or specialized HAZMAT boots are also permitted. DO NOT wear any form of boot or overboot made of nylon or nylon blends. DO NOT USE cotton, wool or leather as these materials react rapidly with higher concentrations of hydrogen peroxide. Completely submerge hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual hydrogen peroxide, if allowed to dry on materials such as paper, fabrics, cotton, leather, wood or other combustibles, can cause the material to ignite and result in a fire.

Hand Protection For hand protection, wear approved gloves made of nitrile, PVC, or neoprene. DO NOT use cotton, wool or leather for these materials react RAPIDLY with higher concentrations of hydrogen peroxide. Thoroughly rinse the outside of gloves with water prior to removal. Inspect regularly for leaks.

Respiratory Protection If concentrations in excess of 10 ppm are expected, use NIOSH/DHHS approved self-contained breathing apparatus (SCBA) or other approved air-supplied respirator (ASR) equipment (e.g., a full-face airline respirator (ALR)). DO NOT use any form of air-purifying respirator (APR) or filtering facepiece (dust mask), especially those containing oxidizable sorbants such as activated carbon.

Hygiene measures Avoid breathing vapors, mist or gas. Clean water should be available for washing in case of eye or skin contamination. .

General information Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear, colorless liquid
Physical State	Liquid
Color	Colorless
Odor	odorless
Odor threshold	Not applicable
pH	<= 3.7
Melting point/freezing point	-33 °C
Boiling Point/Range	108 °C
Flash point	Not flammable
Evaporation Rate	> 1 (n-butyl acetate=1)
Flammability (solid, gas)	Not flammable
Flammability Limit in Air	Not applicable
Upper flammability limit:	
Lower flammability limit:	
Vapor pressure	23 mm Hg @ 30 °C
Vapor density	No information available
Density	1.13 g/cm³ @ 20ºC
Specific gravity	1.13
Water solubility	completely soluble
Solubility in other solvents	No information available
Partition coefficient	log Kow = -1.5 @ 20 °C
Autoignition temperature	Not combustible
Decomposition temperature	100 °C (adiabatic)

Viscosity, kinematic	1.10 cP @ 20 °C
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing properties	Strong oxidizer
Molecular weight	34
Bulk density	Not applicable

10. STABILITY AND REACTIVITY

Reactivity Reactive and oxidizing agent.

Chemical Stability Stable under normal conditions. Decomposes on heating. Stable under recommended storage conditions.

Possibility of Hazardous Reactions Contact with organic substances may cause fire or explosion. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid Excessive heat; Contamination; Exposure to UV-rays; pH variations.

Incompatible materials Combustible materials. Copper alloys, galvanized iron. Strong reducing agents. Heavy metals. Iron. Copper alloys. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.

Hazardous Decomposition Products Oxygen which supports combustion. Liable to produce overpressure in container.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral 50% solution: LD50 > 225 mg/kg bw (rat)
35 % solution:LD50 1193 mg/kg bw (rat)
70 % solution: LD50 1026 mg/kg bw (rat)

LD50 Dermal 35% solution: LD50 > 2000 mg/kg bw (rabbit)
70 % solution: LD50 9200 mg/kg bw (rabbit)

LC50 Inhalation 50% solution: LC50 > 170 mg/m³ (rat) (4-hr)
Hydrogen Peroxide vapors: LC0 9400 mg/m³ (mouse) (5 - 15 minutes)
Hydrogen Peroxide vapors: LC50 > 2160 mg/m³ (mouse)

Serious eye damage/eye irritation Corrosive. Risk of serious damage to eyes.
Skin corrosion/irritation Moderately irritating (rabbit).

Sensitization Did not cause sensitization on laboratory animals.

Information on toxicological effects

Symptoms Vapors, mists, or aerosols of hydrogen peroxide can cause upper airway irritation, inflammation of the nose, hoarseness, shortness of breath, and a sensation of burning or tightness in the chest. Prolonged exposure to concentrated vapor or to dilute solutions can cause irritation and temporary bleaching of skin and hair. Exposure to vapor, mist, or aerosol can cause stinging pain and tearing of eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity This product contains hydrogen peroxide. The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence for carcinogenicity of hydrogen peroxide in humans, but limited evidence in experimental animals (Group 3 - not classifiable as to its carcinogenicity to humans). The American Conference of Governmental Industrial Hygienists (ACGIH) has concluded that hydrogen peroxide is a

'Confirmed Animal Carcinogen with Unknown Relevance to Humans' (A3).

Chemical name	ACGIH	IARC	NTP	OSHA
Hydrogen peroxide 7722-84-1	A3	3		

Mutagenicity This product is not recognized as mutagenic by Research Agencies
In vivo tests did not show mutagenic effects

Reproductive toxicity No toxicity to reproduction in animal studies.

STOT - single exposure May cause respiratory irritation.
STOT - repeated exposure Not classified.

Target organ effects Eyes, Respiratory System, Skin.

Aspiration hazard Aspiration risk: may cause lung damage if swallowed.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects Hydrogen peroxide is naturally produced by sunlight (between 0.1 and 4 ppb in air and 0.001 to 0.1 mg/L in water). Not expected to have significant environmental effects.

Hydrogen peroxide (7722-84-1)				
Active Ingredient(s)	Duration	Species	Value	Units
Hydrogen peroxide	96 h LC50	Fish Pimephales promelas	16.4	mg/L
Hydrogen peroxide	72 h LC50	Fish Leuciscus idus	35	mg/L
Hydrogen peroxide	48 h EC50	Daphnia pulex	2.4	mg/L
Hydrogen peroxide	24 h EC50	Daphnia magna	7.7	mg/L
Hydrogen peroxide	72 h EC50	Algae Skeletonema costatum	1.38	mg/L
Hydrogen peroxide	21 d NOEC	Daphnia magna	0.63	mg/L

Persistence and degradability Hydrogen peroxide in the aquatic environment is subject to various reduction or oxidation processes and decomposes into water and oxygen. Hydrogen peroxide half-life in freshwater ranged from 8 hours to 20 days, in air from 10 - 20 hours, and in soils from minutes to hours depending upon microbiological activity and metal contamination.

Bioaccumulation Material may have some potential to bioaccumulate but will likely degrade in most environments before accumulation can occur.

Mobility Will likely be mobile in the environment due to its water solubility but will likely degrade over time.

Other Adverse Effects Decomposes into oxygen and water. No adverse effects.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods Dispose of in accordance with local regulations. Can be disposed as waste water, when in compliance with local regulations.

US EPA Waste Number D001

Contaminated Packaging Dispose of in accordance with local regulations.
Drums - Empty as thoroughly as possible. Triple rinse drums before disposal. Avoid contamination; impurities accelerate decomposition. Never return product to original

container.

14. TRANSPORT INFORMATION

DOT

UN/ID no	2014
Proper Shipping Name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazard class	5.1
Subsidiary class	8
Packing Group	II

TDG

UN/ID no	UN 2014
Proper Shipping Name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazard class	5.1
Subsidiary class	8
Packing Group	II

ICAO/IATA

Air regulation permit shipment of Hydrogen Peroxide (<=40%) in non-vented containers for Air Cargo Only aircraft, as well as for Passenger and Cargo aircraft. HOWEVER, all PeroxyChem Hydrogen Peroxide containers are vented and therefore, air shipments of PeroxyChem H2O2 are not permitted. IATA air regulations state that venting of packages containing oxidizing substances is not permitted for air transport.

IMDG/IMO

UN/ID no	UN 2014
Proper Shipping Name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazard class	5.1
Subsidiary Hazard Class	8
Packing Group	II

OTHER INFORMATION

Protect from physical damage. Keep drums in upright position. Drums should not be stacked in transit. Do not store drums on wooden pallets.

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	SARA RQ
Hydrogen peroxide 7722-84-1		1000 lb	

Hydrogen Peroxide RQ is for concentrations of > 52% only

International Inventories

Component	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)	NZIoC (New Zealand)
Hydrogen peroxide 7722-84-1 (35)	X	X	X	X	X	X	X	X	X

Mexico - Grade Serious risk, Grade 3

CANADA

WHMIS Hazard Class
C - Oxidizing materials
D1B - Toxic materials
E - Corrosive material
F - Dangerously reactive material




16. OTHER INFORMATION

NFPA	**Health Hazards** 3	**Flammability** 0	**Stability** 1	**Special Hazards** OX
HMIS	**Health Hazards** 3	**Flammability** 0	**Physical hazard** 1	**Special precautions** H

NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0
Special Hazards: OX = Oxidizer
Protection = H (Safety goggles, gloves, apron, the use of supplied air or SCBA respirator is required in lieu of a vapor cartidge respirator)

Uniform Fire Code Oxidizer: Class 2--Liquid

Revision date: 2015-03-18
Revision note Initial Release

Disclaimer

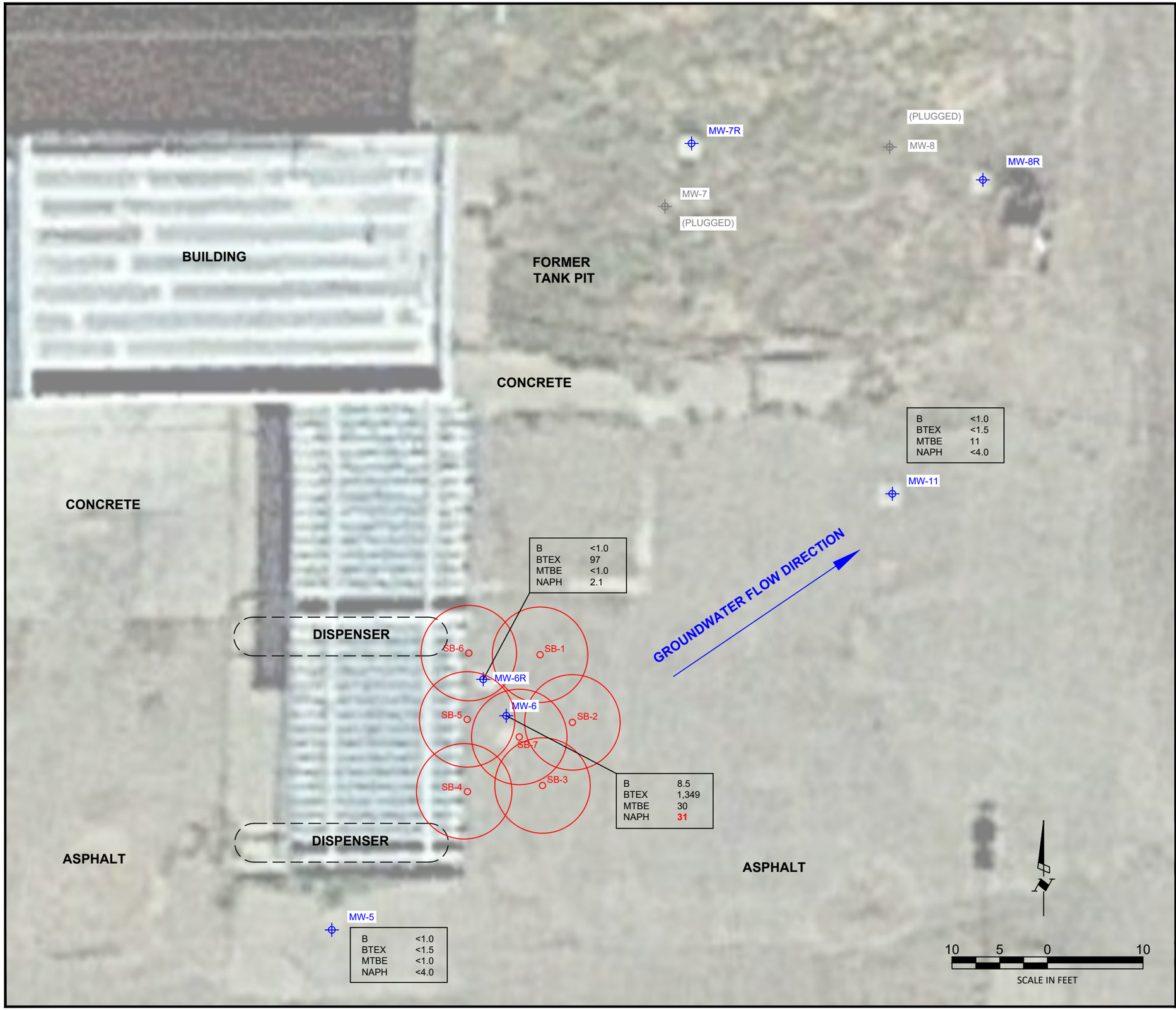
PeroxyChem believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use are beyond the control of PeroxyChem, PeroxyChem expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

Prepared By:

PeroxyChem

End of Safety Data Sheet

APPENDIX D – DRAWING



LEGEND:

MW-5	EXISTING MONITORING WELL
MW-9 PLUGGED	PLUGGED MONITORING WELL
	PROPOSED INJECTION LOCATION AND ESTIMATED RADIUS OF INFLUENCE OF 5 FEET

B	BENZENE
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
MTBE	METHYL TERTIARY BUTYL ETHER
NAPH	TOTAL NAPHTHALENES

NOTES: LISTED CONCENTRATIONS ARE IN MICROGRAMS PER LITER. GROUNDWATER SAMPLES WERE COLLECTED IN OCTOBER 2018.

INSTALL SOIL BORING INTO ASPHALT, PER AS PER SITE OWNER REQUEST

VENER M. MUSTAFIN
NEW MEXICO
17630
LICENSED PROFESSIONAL ENGINEER
V. Mustafin
01/28/2019

YOCUM'S TEXACO
1823 TUCUMCARI BOULEVARD
TUCUMCARI, NEW MEXICO

DRAWING C-1
SITE LAYOUT, OCTOBER 2018 GROUNDWATER SAMPLING RESULTS, AND PROPOSED INJECTION LAYOUT

PROJECT #:	6331801	PROJECT PHASE:	1	PROJECT MANAGER:	VM

320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013
Fax: (505) 224-9016
EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. PBC

P:\Active Projects\PSTB State lead\Yocums Texaco\Report\9-3 Limited FRP\Appendix D - Drawings

APPENDIX E – FIELD FORMS

HYDROGEN PEROXIDE INJECTION LOG
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

Date:	
EA Personnel on Site:	
Subcontractors on Site:	
Safety Briefing Conducted by:	at time:
Rig Type, Manufacturer, Model:	
Transfer Pump Type, Manufacturer, Model:	
Injection Pump Type, Manufacturer, Model:	
Hydrogen Peroxide Concentration, Manufacturer:	
Batch Mix:	
Volume of Water:	
Volume of Hydrogen Peroxide at _____ Concentration:	

Boring ID:				**Boring ID:**			
Depth, ft bgs	Start Vol, gal	End Vol, gal	Pressure, psig	Depth, ft bgs	Start Vol, gal	End Vol, gal	Pressure, psig

EA Engineering, Science, and Technology, Inc. PBC
3200 Gold Avenue SW, #1300
Albuquerque, NM 87102

EA Engineering, Science, and Technology
320 Gold Avenue SW, Suite 1210
Albuquerque, NM 87102
Phone: (505) 224-9013

MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID _____ Date gauged _____

Site _____ Time gauged _____

Depth to PSH _____ Feet Well diameter _____ Inches

Depth to water _____ Feet Height of fluid column _____ Feet

Total depth _____ Feet Volume in well _____ Gallons

NAPL thickness _____ Feet

(3 well volumes = _____ gallons)

After Bailing NAPL

Depth to PSH _____ Feet

Depth to water _____ Feet

NAPL thickness _____ Feet

NAPL Recovered _____ Gallons

GROUNDWATER SAMPLING DATA

Time/date purged _____ Purge Method _____

Time	Purge Volume (gal)	Temp (˚C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)

Actual purge volume _____ gal. Field measurements stabilized within ± 10%? _____

Time/date sampled _____ Purged/sampled by _____

Sample method _____

Requested analyses _____

Comments/observations _____

Well Casing Volumes

2" diameter = 0.17 gal/ft 4" diameter = 0.66 gal/ft 6" diameter = 1.50 gal/ft

APPENDIX F – DISCHARGE PERMIT DP-1874 AND PROOF OF PUBLIC NOTICE

NEW MEXICO ENVIRONMENT DEPARTMENT
GROUND WATER QUALITY BUREAU

UNDERGROUND INJECTION CONTROL

GENERAL DISCHARGE PERMIT

Certified Mail- Return Receipt Requested

Facility Name:	**Yocum Texaco**
Facility Location:	**1823 East Tucumcari Blvd.** **Tucumcari, NM, 88401** **35 10' 19.60" 103 42' 16.35"** **Quay County**
Legally Responsible Party:	**NMED PSTB** **2905 Rodeo Park Drive East, Building 1** **Santa Fe, NM 87505** **(505) 476-4385**
Remediation Oversight Agency Contact:	**NMED PSTB** **Lorena Goerger** **(505) 476-4385**
Remediation or Injection Plan Identification:	**Yocum's Texaco**
Permitting Action:	**New**
PPS Contact	**Jason G. Herman** **(505) 827-2713**

EFFECTIVE DATE: _____ **TERM ENDS:** _____

_____

Michelle Hunter
Chief, Ground Water Quality Bureau

[Subsection H of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.I]

I. UIC GENERAL DISCHARGE PERMIT

The New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) issues this Underground Injection Control General Discharge Permit (UIC Permit) for the subsurface emplacement of additive fluids through a Class V UIC injection well for the purpose of facilitating vadose zone or ground water remediation. The GWQB issues this UIC Permit to New Mexico Environment Department Petroleum Storage Tank Bureau (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Ground and Surface Water Protection Regulations, 20.6.2 NMAC.

In issuing this UIC Permit, the GWQB has determined that the requirements of Subsection C of 20.6.2.3109 NMAC have been met. The activities authorized by this UIC Permit are principally governed by Yocum's Texaco Injection Plan (Injection Plan), under the authority of STATUTES/REGULATIONS, with oversight by the New Mexico Environment Department Petroleum Storage Tank Bureau. Compliance with this UIC Permit requires compliance with the terms, requirements, and conditions of the Injection Plan. The term of this UIC Permit shall be no longer than five years from the effective date of this UIC Permit.

The injection activities, the location of the injection site, the type of injection and quantities of additives being used are briefly described as follows:

Injection Activities (summary: including injection well type, number of wells, and injection frequency)

Copy of the Injection Plan Attached (required): (Attached)

Injection Site Information

Depth to Ground Water: Approximately 14 ft Existing concentration of total dissolved solids (TDS) in ground water: ~1,300 mg/L (estimated based on average Specific Conductivity of 2,000 µS/cm). Location: 1823 East Tucumcari Blvd., Tucumcari, NM, 88401 County: Quay Latitude: 35 10' 19.60" Longitude: 103 42' 16.35" Map Showing Area of Injection Sites Attached (required) -: (Attached)

Additives Being Used (including volumes, manufacturer, and mixing ratios)

Approximately 1,600 gallons of hydrogen peroxide 10% solution in water (160 gallons of hydrogen peroxide mixed with 1,440 gallons of water).

Anticipated Precipitation, Dissolution, Adsorption, and Desorption Products

No precipitation, dissolution, adsorption, or desorption products are anticipated. Final reaction products are water and carbon dioxide.

Public Notice Posting Locations

2 inch by 3 inch Newspaper Ad required for New, Renewal, Modification and Renewal/Modification applications.
Newspaper: Quay County Sun

2 feet by 3 feet sign posted for 30 days in a location conspicuous to the public at or near the facility required for New, Modification and Renewal/Modification applications.
Sign Location: 1823 East Tucumcari Blvd., Tucumcari, NM, 88401

8.5 inch by 11 inch or larger posted off-site location conspicuous to the public (e.g. public library). Required for New, Modification and Renewal/Modification applications.
Flyer Location: 602 S 2nd St, Tucumcari, NM 88401

This UIC Permit consists of the complete and accurate completion of this UIC Permit form as determined by the GWQB.

Issuance of this UIC Permit does not relieve the Permittee of the responsibility to comply with the WQA, WQCC Regulations, and any other applicable federal, state and/or local laws and regulations, such as zoning requirements and nuisance ordinances.

Signatures

Signature must be that of the person listed as the legally responsible party on this application.

I, the applicant, attest under penalty of law to the truth of the information and supporting documentation contained in this application for an Underground Injection Control General Discharge Permit.

Applicant's Signature

Signature: _____ Date: 10/30/18

Printed Name: LORENA GOERGER Title: PROGRAM MANAGER, PSTB

II. FINDINGS

In issuing this UIC Permit, GWQB finds:

1. The Permittee is injecting fluids so that such injections will move directly or indirectly into ground water within the meaning of Section 20.6.2.3104 NMAC.
2. The Permittee is injecting fluids so that such fluids will move into ground water of the State of New Mexico which has an existing concentration of 10,000 mg/L or less of TDS within the meaning of Subsection A of 20.6.2.3101 NMAC.
3. The Permittee is using a Class V UIC well as described in 20.6.2.5002(B)(5)(d)(ii) NMAC for in situ ground water remediation by injecting a fluid that facilitates vadose zone or groundwater remediation.
4. The Permittee is injecting fluids into groundwater in order to achieve the remediation goals identified in the Injection Plan.

III. AUTHORIZATION TO DISCHARGE

The Permittee is authorized to inject chemical additives into ground water in accordance with this UIC Permit and the Injection Plan under the oversight of NMED PSTB.

[20.6.2.3104 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection C of 20.6.2.3109 NMAC]

IV. CONDITIONS

The conditions of this UIC Permit shall be complied with by the Permittee and are enforceable by GWQB.

1. The Permittee shall perform remediation activities in accordance with the Injection Plan and shall notify GWQB of any changes prior to making them.

   [20.6.2.3107 NMAC]

2. The Permittee shall monitor the injection activities and their effects on ground water quality as required by the Injection Plan and shall provide GWQB with electronic copies of the required reporting and any pertinent documentation of activities at the site.

   [20.6.2.3107.A NMAC, 20.6.2.3109.A NMAC]

3. If the GWQB or the Permittee identifies any failure of the Injection Plan or this UIC Permit to comply with 20.6.2 NMAC not specifically noted herein, GWQB may require the Permittee to

submit a corrective action plan and a schedule for completion of corrective actions to address the failure.

Additionally, the GWQB may the Permittee to submit a proposed modification to the Injection Plan, this UIC Permit, or both.

[20.6.2.3107.A NMAC, 20.6.2.3109.E NMAC]

4. ADDITIONAL MONITORING REQUIREMENTS – (RESERVED) - Placeholder for any added monitoring and reporting requirements.

5. TERMINATION – Within 30 days of completion of activities authorized by this UIC Permit the Permittee shall submit a closure report and a request to terminate the UIC Permit to the GWQB for its approval. The closure report shall identify how the injection well(s) was closed in accordance with the Injection Plan. The Permittee shall provide NMED PSTB with a copy of this closure report.

   [20.6.2.5005 NMAC, 19.27.4 NMAC]

6. INSPECTION and ENTRY – The Permittee shall allow a representative of the NMED to inspect the facility and its operations subject to this UIC Permit and the WQCC regulations. The GWQB representative may, upon presentation of proper credentials, enter at reasonable times upon or through any premises in which a water contaminant source is located or in which are located any records required to be maintained by regulations of the federal government or the WQCC.

   The Permittee shall allow the GWQB representative to have access to, and reproduce for their use, any copy of the records, and to perform assessments, sampling or monitoring during an inspection for the purpose of evaluating compliance with this UIC Permit and the WQCC regulations.

   Nothing in this UIC Permit shall be construed as limiting in any way the inspection and entry authority of GWQB under the WQA, the WQCC Regulations, or any other local, state or federal regulations.

   [20.6.2.3107.D NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]

7. MODIFICATIONS and/or AMENDMENTS – In the event the Permittee proposes a change to the injection plan that would result in a change in the volume injected; the location of the injections; or the concentration of the additives being injected by the facility, the Permittee shall notify GWQB prior to implementing such changes. The Permittee shall obtain approval (which may require modification of this UIC Permit) by GWQB prior to implementing such changes.

   [20.6.2.3107.C NMAC, 20.6.2.3109.E and G NMAC]

8. COMPLIANCE with OTHER LAWS – Nothing in this UIC Permit shall be construed in any way as relieving the Permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits or orders.

   [NMSA 1978, § 74-6-5.L]

9. PERMIT FEES – Payment of permit fees is due at the time of UIC Permit approval. Permit fees shall be paid in a single payment remitted to GWQB no later than 30 days after the UIC Permit effective date.

   Permit fees are associated with issuance of this UIC Permit. Nothing in this UIC Permit shall be construed as relieving the Permittee of the obligation to pay all permit fees assessed by GWQB. A Permittee that ceases injecting or does not commence injecting during the term of the UIC Permit shall pay all permit fees assessed by GWQB. An approved UIC Permit shall be suspended or terminated if the facility fails to remit a payment by its due date.

   [20.6.2.3114.F NMAC, NMSA 1978, § 74-6-5.K]

INJECTION PLAN
YOCUM'S TEXACO
1823 EAST TUCUMCARI BLVD., TUCUMCARI, NM

Objective: The objective of the proposed injection is to mitigate residual dissolved groundwater concentrations of naphthalenes in MW-6 to below the New Mexico Quality Control Commission (NMWQCC) standard of 30 micrograms per liter (µg/L). Detections of naphthalenes in groundwater are associated with a release of gasoline at the site.

Overseeing Agency: Work is being done under Contract # 18 667 3200 0020 that is funded and lead by the New Mexico Environment Department Petroleum Storage Tank Bureau (NMED PSTB).

Solution: To achieve the objective, approximately 1,600 gallons of 10% hydrogen peroxide solution in water will be injected into subsurface using an existing injection drain.

Injection Point: Solution will be injected into subsurface using a direct push Geoprobe rig. Up to seven (7) soil borings will be advanced to approximately 20 feet bgs.

Injection: In each boring, remediation fluids will be injected starting at approximately 5 feet bgs to the bottom of the boring using a top-down approach. Injection volume, flowrate, and pressure will be monitored.

Injection Frequency: One injection event has been approved and funded by the NMED PSTB.

LEGEND:

MW-5	EXISTING MONITORING WELL
MW-9 PLUGGED	PLUGGED MONITORING WELL
	PROPOSED INJECTION LOCATION AND ESTIMATED RADIUS OF INFLUENCE OF 5 FEET

B	BENZENE
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
MTBE	METHYL TERTIARY BUTYL ETHER
NAPH	TOTAL NAPHTHALENES

NOTE: LISTED CONCENTRATIONS ARE IN MICROGRAMS PER LITER. GROUNDWATER SAMPLES WERE COLLECTED IN JANUARY 2018

20 10 0 20

SCALE IN FEET

YOCUM'S TEXACO
1823 TUCUMCARI BOULEVARD
TUCUMCARI, NEW MEXICO

FIGURE 1
SITE LAYOUT, JANUARY 2018
GROUNDWATER SAMPLING RESULTS,
AND PROPOSED INJECTION LAYOUT

PROJECT #:	WP	PROJECT PHASE:	WP	PROJECT MANAGER:	VM

320 Gold Avenue, SW Suite 1300
Albuquerque, NM 87102
Phone: (505) 224-9013
Fax: (505) 224-9016
EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. PBC

P:\Active Projects\PSTB State lead\Yocums Texaco\Work Plan\7_Injection_WP\Figures

NEW MEXICO
ENVIRONMENT DEPARTMENT

Ground Water Quality Bureau
1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, New Mexico 87502-5469
Phone (505) 827-2900 Fax (505) 827-2965
www.env.nm.gov

SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

BUTCH TONGATE
Cabinet Secretary

BRUCE YURDIN
Acting Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

November 26, 2018

New Mexico Environment Department Petroleum Storage Tank Bureau
Attn: Lorena Goerger
2905 Rodeo Park Drive East, Building 1
Santa Fe NM, 87505

RE: Administrative Completeness Determination and Applicant's Public Notice Requirements, DP-1874, Yocum Texaco

Dear Lorena Goerger,

The New Mexico Environment Department (NMED) received a Groundwater Discharge Permit Application for the above referenced facility on October 31, 2018. Pursuant to Section 20.6.2.3108 NMAC of the New Mexico Ground and Surface Water Protection Regulations (20.6.2 NMAC), NMED determined on November 15, 2018, that your application is administratively complete.

Within 30 days of the date when the US Postal Service first makes notice to you of its possession of this letter, you must provide public notice. Instructions and materials needed to complete the public notice are enclosed.

INSTRUCTIONS FOR COMPLETING PUBLIC NOTICE REQUIREMENTS

Discharge Permit DP-1874 ☒ New ☐ Renewal/Modification ☐ Modification

Within 30 days of the date when the US Postal Service first makes notice to you of its possession of this letter, you must provide public notice as follows:

1. **Post sign(s) at the facility.**
   A sign 2 x 3 feet in size (or multiple signs if required) must be posted **at or near the facility for 30 days** in a conspicuous location approved by NMED. The text for the poster is enclosed. It is the responsibility of the applicant to provide the poster. NMED approves the following sign posting location(s).

   One sign to be posted at 1823 East Tucumcari Blvd., Tucumcari, NM 88401

2. **Post a public notice flyer off-site.**
   The enclosed public notice flyer which must be posted **off-site** at a location conspicuous to the public and approved by NMED. NMED approves the following flyer posting location:

   One flyer to be placed at the Tucumcari Public Library located at 602 S. 2nd Street, Tucumcari, NM 88401

3. **Mail a public notice flyer to property owners within 1/3 mile.**
   A copy of the enclosed public notice flyer must be sent by 1st class mail to the owners of record of all properties within 1/3 mile from the boundary of the property where the discharge site is located. If there are no properties within 1/3 mile other than properties owned by the applicant, then the flyer must be mailed to the owners of record of the nearest adjacent properties.

   The names and addresses of property owners can be obtained from the county tax assessor's office. The list of property owners' names and addresses must be submitted to NMED.

4. **Mail a public notice flyer to the owner of the discharge site.**
   A copy of the enclosed flyer must be sent via certified mail, return receipt requested, to the owner(s) of the discharge site(s), if the applicant is not the owner. The list of owners' names and addresses and the certified mail receipts must be submitted to NMED.

5. **Place a display ad in the newspaper.**
   A display ad 3 x 4 inches in size must be published for one day in a newspaper of general circulation in the location of the proposed discharge. The ad may **not** be placed in the classified or legal section. The text for the ad is enclosed. NMED approves publishing the ad in the following newspaper:

   Quay County Sun

PROOF OF NOTICE. Within 15 days of completing the above requirements, the applicant must submit the following items as proof of notice to NMED:

- ✓ Affidavit regarding the sign posting and mailing (form enclosed).
- ✓ List of names and addresses to whom the public notice flyer was mailed.
- ✓ List of names and addresses of owners of discharge sites.
- ✓ Certified mail receipts for mailing to discharge site owner(s), if required.
- ✓ Copy of newspaper ad.

Send to NMED Ground Water Quality Bureau, PO Box 5469, Santa Fe, NM 87502.

Reviewer's Initials and Date JH 11/21/18

PUBLIC NOTICE

Receipt of Discharge Permit Application

DP-1874, Yocum Texaco

DP-1874, Yocum Texaco: New Mexico Environment Department Petroleum Storage Tank Bureau (PSTB) proposes to discharge up to 1,600 gallons of remediation amendments to injection wells. Potential contaminants from this type of discharge include organic and inorganic compounds. The facility is located at 1823 East Tucumcari Blvd., Tucumcari, in Sections 13, T11N, R30E, Quay County. Groundwater most likely to be affected is at a depth of approximately 14 feet and had a pre-discharge total dissolved solids concentration of 1,300 milligrams per liter.

Provided the applicant has met applicable requirements, the New Mexico Environment Department (NMED) will propose a Discharge Permit containing limitations, monitoring requirements, and other conditions intended to protect groundwater quality for present and potential future use. Information in this public notice was provided by the applicant and will be verified by NMED during the permit application review process. NMED will develop a Public Involvement Plan (PIP) to identify all communities potentially affected by the proposed permitted activity and expand public participation opportunities to accommodate the needs of those communities. The PIP will be posted online at https://www.env.nm.gov/gwqb/public-involvement-plans/ and placed at the NMED field office nearest to the proposed permitted activity. NMED will accept comments and statements of interest regarding the application and will create a facility specific mailing list for persons who wish to receive future notices.

Questions, comments, statements of interest, or requests for non-English language assistance should be directed to:
Jason Herman, DP-1874
Ground Water Quality Bureau
PO Box 5469
Santa Fe, NM 87502
(505) 827-2900

Applicant:
Petroleum Storage Tank Bureau
Attn: Lorena Goerger
Program Manager
2905 Rodeo Park Drive East, Building 1
Santa Fe NM, 87505

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Parts 5 and 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non- discrimination programs, policies or procedures, you may contact: Kristine Pintado, Non-Discrimination Coordinator, New Mexico Environment Department, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@state.nm.us. If you believe that you have been discriminated against with respect to a NMED program or activity, you may contact the Non-Discrimination Coordinator identified above or visit our website at https://www.env.nm.gov/non-employee-discrimination-complaint-page/ to learn how and where to file a complaint of discrimination. Telephone conversation assistance is available through Relay New Mexico at no charge for people who are deaf, hard of hearing, or have difficulty speaking on the phone, by calling 1-800-659-1779; TTY users: 1-800-659-8331; Spanish: 1-800-327-1857.

AVISO PÚBLICO

Recibo de la Aplicación del Permiso de Descarga

DP-1874, Yocum Texaco

DP-1874, Yocum Texaco: La Oficina de Tanques de Almacenamiento de Petróleo del Departamento de Medio Ambiente de Nuevo México propone descargar hasta 1.600 galones de enmiendas de remediación a pozos de inyección. Los posibles contaminantes asociados con este tipo de descarga incluyen compuestos orgánicos y compuestos inorgánicos. La instalación está ubicada en 1823 East Tucumcari Blvd., Tucumcari, en la Sección 13, T11N, R30E, condado de Quay. El agua subterránea que tiene mayor probabilidad de verse afectada se encuentra a una profundidad aproximada de 14 pies y tenía una concentración de sólidos disueltos totales antes del vertido de 1.300 miligramos por litro.

Siempre que el solicitante cumpla con los requisitos aplicables, el Departamento de Medio Ambiente de Nuevo México (NMED, por sus siglas en inglés) propondrá para su aprobación un Permiso de Descarga que contiene limitaciones, requisitos de monitoreo, y otras condiciones destinadas a proteger la calidad del agua subterránea para su uso actual y potencial uso en el futuro. La información en esta notificación pública fue provista por los solicitantes y será verificada por NMED durante el proceso de revisión de solicitudes de permiso. NMED desarrollará un Plan de Participación Pública (PIP) para identificar a todas las comunidades potencialmente afectadas por la actividad permitida propuesta y ampliar las oportunidades de participación pública para acomodar las necesidades de esas comunidades. El PIP será publicado en línea en https://www.env.nm.gov/gwqb/public-involvement-plans/ y se colocará en la oficina de campo de NMED más cercana a la actividad autorizada propuesta. El NMED aceptará comentarios y declaraciones de interés con respecto a las solicitudes y creará listas de correo específicas de las instalaciones para las personas que deseen recibir avisos en el futuro.

Todas las preguntas, comentarios, declaraciones de interés o solicitudes de asistencia en otro idioma deben dirigirse a:
Jason Herman, DP-1874
La Oficina de Calidad de Aguas Subterráneas
PO Box 5469
Santa Fe, NM 87502
(505) 827-2900

Solicitante:
Petroleum Storage Tank Bureau
Attn: Lorena Goerger
Program Manager
2905 Rodeo Park Drive East, Building 1
Santa Fe NM, 87505

NMED no discrimina por motivos de raza, color, origen nacional, discapacidad, edad o sexo en la administración de sus programas o actividades, según lo exigido por las leyes y los reglamentos correspondientes. NMED es responsable de la coordinación de los esfuerzos de cumplimiento y la recepción de indagaciones relativas a los requisitos de no discriminación implementados por 40 C.F.R. Partes 5 y 7, incluido el Título VI de la Ley de Derechos Civiles de 1964, según enmendada; Sección 504 de la Ley de Rehabilitación de 1973; la Ley de Discriminación por Edad de 1975, Título IX de las Enmiendas de Educación de 1972 y la Sección 13 de las Enmiendas a la Ley Federal de Control de Contaminación del Agua de 1972. Si usted tiene preguntas sobre este aviso o sobre cualquier programa, política o procedimiento de no discriminación de NMED, usted puede comunicarse con la Coordinadora de No Discriminación: Kristine Pintado, Non-Discrimination Coordinator, New Mexico Environment Department, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@state.nm.us. Si usted piensa que ha sido discriminado/a con respecto a un programa o actividad de NMED, usted puede comunicarse con la Coordinadora de No Discriminación antes indicada o visitar nuestro sitio web en https://www.env.nm.gov/non-employee-discrimination-complaint-page/ para aprender cómo y dónde presentar una queja de discriminación. Hay disponible asistencia telefónica de conversación sin costo alguno a través de Relay New Mexico para personas sordas, con dificultades auditivas o que tengan dificultad para hablar por teléfono, llamando al 1-800-659-1779; usuarios de TTY: 1-800-659-8331; español: 1-800-327-1857.

Public Notice Synopsis, DP-1874
(for poster and newspaper display ad)

Newspaper display ad must be at least 3 inches by 4 inches in size and must be published for at least one day in a section other than the classifieds or legals.

Poster must be made to be at least 2 feet by 3 feet in size and must be posted at or near the facility, in a location approved by the department, and conspicuous to the public for a period of 30 days. For more than 640 contiguous acres of a discharge site, or when the discharge site is not located on contiguous properties, additional posters may be required.

PUBLIC NOTICE **DISCHARGE PERMIT APPLICATION**	**AVISO PÚBLICO** **APLICACIÓN PARA PERMISO DE DESCARGA**
NMED PSTB proposes to inject up to 1,600 gallons of remediation amendments to injection Wells. Discharge location: 1823 East Tucumcari Blvd., Tucumcari, NM 88401. For additional information, contact the New Mexico Environment Department and reference: DP-1874 PN1.	NMED PSTB propone descargar un máximo de 1.600 galones de enmiendas de remediación a pozos de inyección. Sitio de descarga: 1823 East Tucumcari Blvd., Tucumcari, NM 88401. Para información adicional comuníquese con el Departamento de Medio Ambiente de Nuevo México y ponga la referencia: DP-1874 PN1.

(505) 827-2900 www.env.nm.gov/gwqb/public-notice

DP-1874 – PROOF OF PUBLIC NOTICE
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

Public Notice was published in Quay County Sun:

AFFIDAVIT OF LEGAL PUBLICATION

LEGAL # 76392

STATE OF NEW MEXICO
COUNTY OF QUAY:

The undersigned, being duly sworn, says:
That she is a Legal Clerk of
The QUAY COUNTY SUN, a daily
Newspaper of general circulation,
published in English at Tucumcari,
said county and state, and that the
hereto attached

PUBLIC NOTICE

was published in said QUAY COUNTY SUN,
a daily newspaper duly
qualified for that purpose within
the meaning of Chapter 167 of the
1937 Session Laws of the State of
New Mexico for 1 consecutive
days/weeks on the same days as follows:

12/12/2018

Copy of Publication

PUBLIC NOTICE
DISCHARGE PERMIT APPLICATION

NMED PSTB proposes to inject up to 1,600 gallons of remediation amendments to injection Wells. Discharge location: 1823 East Tucumcari Blvd., Tucumcari, NM 88401. For additional information, contact the New Mexico Environment Department and reference: DP-1874 PN1.

AVISO PÚBLICO
APLICACIÓN PARA PERMISO DE DESCARGA

NMED PSTB propone descargar un máximo de 1.600 galones de enmiendas de remediación a pozos de inyección. Sitio de descarga: 1823 East Tucumcari Blvd., Tucumcari, NM 88401. Para información adicional comuníquese con el Departamento de Medio Ambiente de Nuevo México y ponga la referencia: DP-1874 PN1.

(505) 827-2900 www.env.nm.gov/gwqb/public-notice

Tammy Newby
Legal Clerk

Subscribed and sworn to before me
12th day of December, 2018

Leslie Nagy
Notary Public
Leslie Nagy

OFFICIAL SEAL
LESLIE NAGY
NOTARY PUBLIC STATE OF NEW MEXICO

My Commission Expires: 05/24/2019

DP-1874 – PROOF OF PUBLIC NOTICE
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

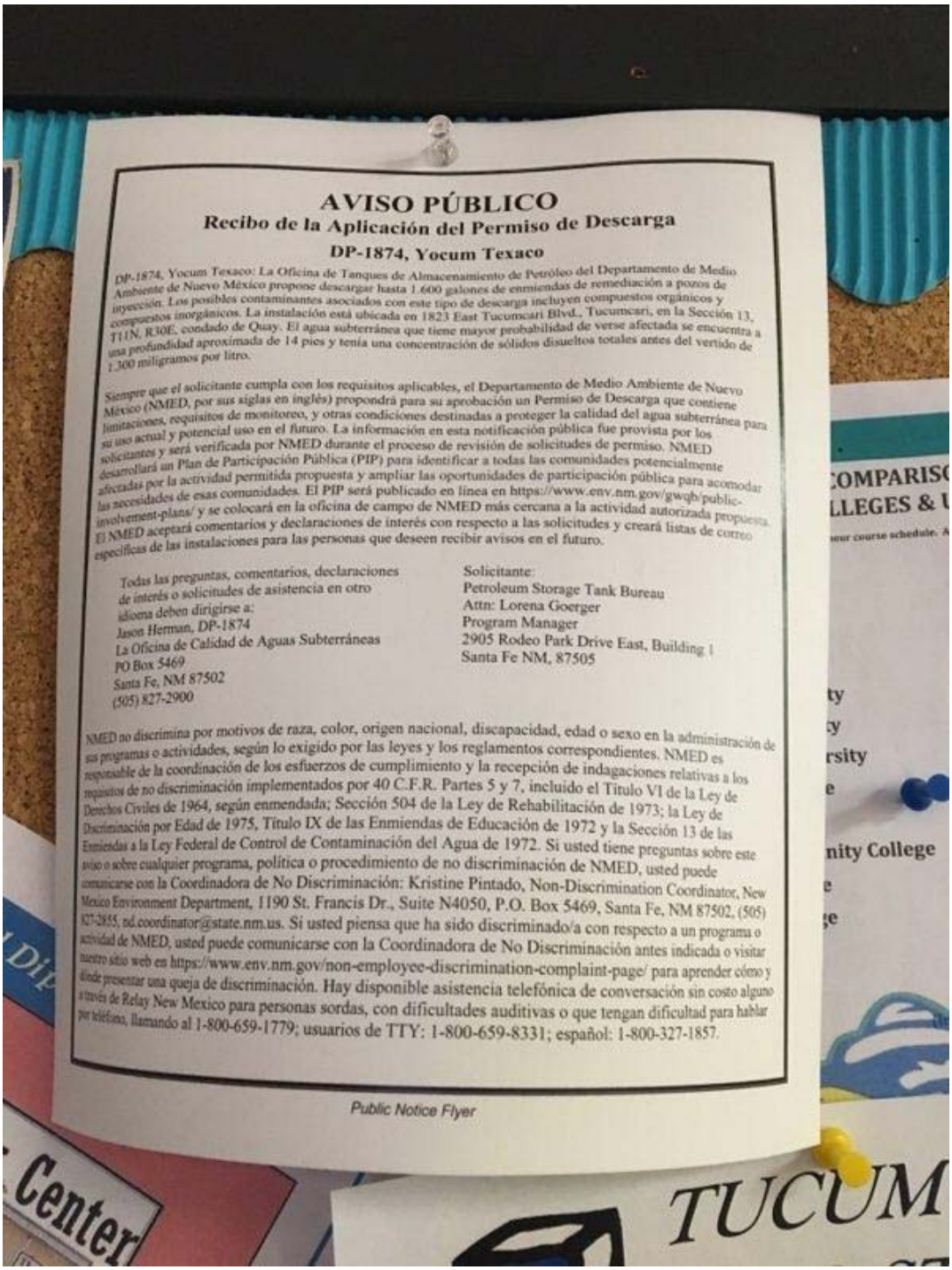
2'x 3' Public Notice in English and Spanish Posted at 1823 East Tucumcari Blvd, Tucumcari, New Mexico

2'x 3' Public Notice in English and Spanish Posted at 1823 East Tucumcari Blvd, Tucumcari, New Mexico

DP-1874 – PROOF OF PUBLIC NOTICE
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

Public Notice in English and Spanish Posted at Tucumcari Library, 602 S. 2nd Street, Tucumcari, New Mexico

DP-1874 – PROOF OF PUBLIC NOTICE
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO



AVISO PÚBLICO
Recibo de la Aplicación del Permiso de Descarga
DP-1874, Yocum Texaco

DP-1874, Yocum Texaco: La Oficina de Tanques de Almacenamiento de Petróleo del Departamento de Medio Ambiente de Nuevo México propone descargar hasta 1,600 galones de enmiendas de remediación a pozos de inyección. Los posibles contaminantes asociados con este tipo de descarga incluyen compuestos orgánicos y compuestos inorgánicos. La instalación está ubicada en 1823 East Tucumcari Blvd., Tucumcari, en la Sección 13, T11N, R30E, condado de Quay. El agua subterránea que tiene mayor probabilidad de verse afectada se encuentra a una profundidad aproximada de 14 pies y tenía una concentración de sólidos disueltos totales antes del vertido de 1,300 miligramos por litro.

Siempre que el solicitante cumpla con los requisitos aplicables, el Departamento de Medio Ambiente de Nuevo México (NMED, por sus siglas en inglés) propondrá para su aprobación un Permiso de Descarga que contiene limitaciones, requisitos de monitoreo, y otras condiciones destinadas a proteger la calidad del agua subterránea para su uso actual y potencial uso en el futuro. La información en esta notificación pública fue provista por los solicitantes y será verificada por NMED durante el proceso de revisión de solicitudes de permiso. NMED desarrollará un Plan de Participación Pública (PIP) para identificar a todas las comunidades potencialmente afectadas por la actividad permitida propuesta y ampliar las oportunidades de participación pública para acomodar las necesidades de esas comunidades. El PIP será publicado en línea en https://www.env.nm.gov/gwqb/public-involvement-plans/ y se colocará en la oficina de campo de NMED más cercana a la actividad autorizada propuesta. El NMED aceptará comentarios y declaraciones de interés con respecto a las solicitudes y creará listas de correo específicas de las instalaciones para las personas que deseen recibir avisos en el futuro.

Todas las preguntas, comentarios, declaraciones de interés o solicitudes de asistencia en otro idioma deben dirigirse a:
Jason Herman, DP-1874
La Oficina de Calidad de Aguas Subterráneas
PO Box 5469
Santa Fe, NM 87502
(505) 827-2900

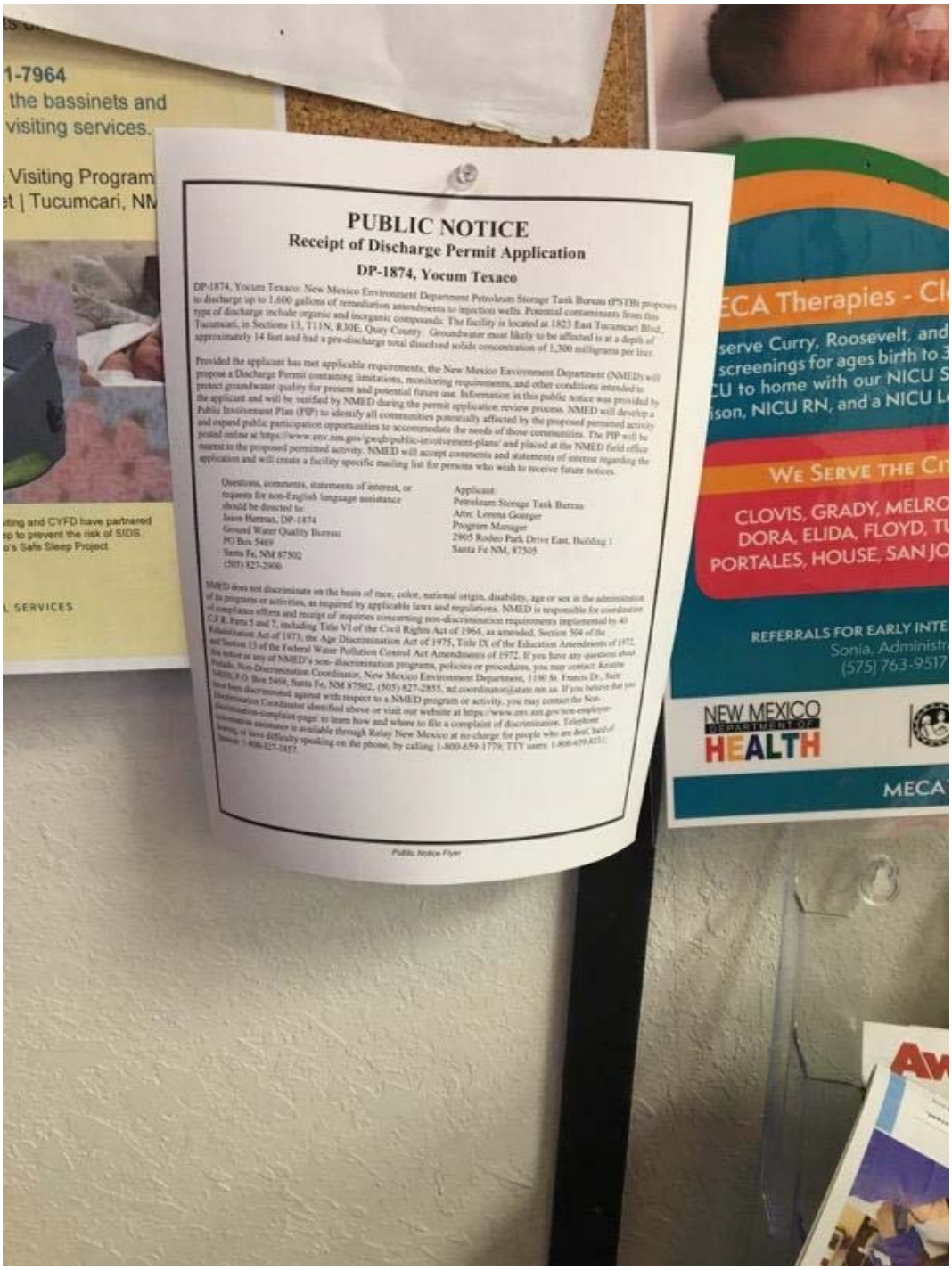
Solicitante:
Petroleum Storage Tank Bureau
Attn: Lorena Goerger
Program Manager
2905 Rodeo Park Drive East, Building 1
Santa Fe NM, 87505

NMED no discrimina por motivos de raza, color, origen nacional, discapacidad, edad o sexo en la administración de sus programas o actividades, según lo exigido por las leyes y los reglamentos correspondientes. NMED es responsable de la coordinación de los esfuerzos de cumplimiento y la recepción de indagaciones relativas a los requisitos de no discriminación implementados por 40 C.F.R. Partes 5 y 7, incluido el Título VI de la Ley de Derechos Civiles de 1964, según enmendada; Sección 504 de la Ley de Rehabilitación de 1973; la Ley de Discriminación por Edad de 1975, Título IX de las Enmiendas de Educación de 1972 y la Sección 13 de las Enmiendas a la Ley Federal de Control de Contaminación del Agua de 1972. Si usted tiene preguntas sobre este aviso o sobre cualquier programa, política o procedimiento de no discriminación de NMED, usted puede comunicarse con la Coordinadora de No Discriminación: Kristine Pintado, Non-Discrimination Coordinator, New Mexico Environment Department, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@state.nm.us. Si usted piensa que ha sido discriminado/a con respecto a un programa o actividad de NMED, usted puede comunicarse con la Coordinadora de No Discriminación antes indicada o visitar nuestro sitio web en https://www.env.nm.gov/non-employee-discrimination-complaint-page/ para aprender cómo y dónde presentar una queja de discriminación. Hay disponible asistencia telefónica de conversación sin costo alguno a través de Relay New Mexico para personas sordas, con dificultades auditivas o que tengan dificultad para hablar por teléfono, llamando al 1-800-659-1779; usuarios de TTY: 1-800-659-8331; español: 1-800-327-1857.

Public Notice Flyer

Public Notice in Spanish Posted at Tucumcari Library, 602 S. 2nd Street, Tucumcari, New Mexico

DP-1874 – PROOF OF PUBLIC NOTICE
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO



Public Notice in English Posted at Tucumcari Library, 602 S. 2nd Street, Tucumcari, New Mexico

DP-1874 – PROOF OF PUBLIC NOTICE
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

Public notice was mailed to the list of names provided by the Quay County Assessor's Office:

DataPrint Services LLC
5201 Venice Ave NE Ste E
Albuquerque, NM 87113-2337

Voice: (505) 821-8000
Fax: (877) 883-3202
ap@dataprintllc.com

EA Engineering
320 Gold Ave
Suite 1300
Albuquerque, NM 87102

Remit to:

DataPrint Services, LLC
5201 Venice Ave NE Ste E
Albuquerque NM 87113-2337

Please return this portion with your payment, or write the invoice number(s) on your check

Customer PO	Payment Terms	Invoice Number	Due Date
	Net 15 Days	61218	12/25/18

Quantity	Item	Description
		YOKUM PUBLIC NOTICE MAILING #6121
1.00		INKJET SETUP/DOCUMENT PREPARATION
350.00		LASER PRINTING
175.00	10010	8.5 x 11 20# White Bond
1.00		STANDARD INSERT SETUP
161.00		INSERTING
161.00		MAILING SERVICES
161.00		IJET ADDRESSING
161.00	20053	#10 24# WW Regular
		POSTAGE USED

DP-1874 MAILING LIST
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

Name	Address 1	City 1	State 1	Zip Code 1	Address 2	City 2	State 2	Zip Code 2
DOW James A Revocable Trust	PO Box 51777	Albuquerque	NM	87181	1823 E Tucumcari Blvd.	Tucumcari	NM	88401
Kevin D Garza	517 East Heman	Tucumcari	NM	88401	1719 E Route 66	Edgewood	NM	87015
Kevin D Garza	1824 E McGee	Tucumcari	NM	88401				
Mark and Debra Whittington	923 Hawthorne	Tucumcari	NM	88401	1421 E Tucumcari Blvd.	Tucumcari	NM	88401
Mark and Debra Whittington	1700 E Hines & Rankin	Tucumcari	NM	88401	1100 S Fig St	Tucumcari	NM	88401
New Mexico State Hway Department	PO Box 1149	Santa Fe	NM	87504				
Points Janet McCoy c/o Janet McCoy	PO Box 527	Tucumcari	NM	88401	1705 E McGee	Tucumcari	NM	88401
Arthur J Molinas	1721 East Laughlin	Tucumcari	NM	88401	1723 E Laughlin	Tucumcari	NM	88401
Tractor Supply Company	5401 Virginia Way	Brentwood	TN	37027-7536	1401 E Tucumcari Blvd.	Tucumcari	NM	88401
Jose and Tutabelle Ojeda	HCR 2 Box 5769	Keaau	HI	96749	1501 E Laughlin	Tucumcari	NM	88401
RL McCoy	PO Box 527	Tucumcari	NM	88401	1821 E McGee	Tucumcari	NM	88401
Warren L. Fischer	PO Box 541656	Houston	TX	77254	1215 E Tucumcari Blvd.	Tucumcari	NM	88401
James Dwight and Pam Haller	PO Box 712 1215 SFifth St.	Tucumcari	NM	88401	1221 E Tucumcari Blvd.	Tucumcari	NM	88401
James Dwight and Pam Haller	1301 E Tucumcari	Tucumcari	NM	88401				
Debra Cox c/o Conf Tonya Cox	402 Section Line Road	Logan	NM	88426	1501 E Tucumcari Blvd.	Tucumcari	NM	88401
Mark and Debra Whittington	923 South Hawthorne	Tucumcari	NM	88401	1803 E Tucumcari Blvd	Tucumcari	NM	88401
Mark and Debra Whittington	924 S Hawthorne	Tucumcari	NM	88401				
Rickey and Toni Haymaker	617 N Centre St.	Cumberland	MD	21502	603 S Date	Tucumcari	NM	88401
Susan Chavez	1423 East McGee	Tucumcari	NM	88401	1423 E McGee	Tucumcari	NM	88401
Robert Dominguez	1417 Sunburst Dr.	Tucumcari	NM	88401				
Juan and Mary Lou Sanchez	601 South Date	Tucumcari	NM	88401	601 S Date	Tucumcari	NM	88401
Mary Otero	523 Roy Lane	Tucumcari	NM	88401	523 Roy Lane	Tucumcari	NM	88401
Robert Lamm	216 Anderson Road	Saraland	AL	36571	523 S Elder	Tucumcari	NM	88401
Mike Gallegos	Box 112	Tucumcari	NM	88401	417 S Apple	Tucumcari	NM	88401
James and Stella Watson	PO Box X	Tucumcari	NM	88401	501 S Apple	Tucumcari	NM	88401
City of Tucumcari	PO Box 1188	Tucumcari	NM	88401	600 Apple	Tucumcari	NM	88401
City of Tucumcari	1500 E Tucumcari Blvd	Tucumcari	NM	88401				
Samuel and Georgia Crespin	1608 South Fourth St	Tucumcari	NM	88401				
Juan and Susan Apodaca	515 Roy Place	Tucumcari	NM	88401	515 Roy Lane	Tucumcari	NM	88401
La Linda Consulting LLC	4209 Quay Road 63	Tucumcari	NM	88401	515 S Elder	Tucumcari	NM	88401
Tomas Gallegos	PO Box 112	Tucumcari	NM	88401	412 S Apple	Tucumcari	NM	88401
Serapio Jaramillo	3742 Quay Road 64.5	Tucumcari	NM	88401	1402-1418 E Laughlin	Tucumcari	NM	88401
Trisha Renee Ysco	1221 E Hancock	Tucumcari	NM	88401				
Rodney and Patricia Ann Rickey	2708 Anders Lane	Plano	TX	75093	509-511 S Apple	Tucumcari	NM	88401
Rodney and Patricia Ann Rickey	1301 E. Laughlin	Tucumcari	NM	88401				
Jose Martinez c/o Andrew and Lorinda Gar	PO Box 102	Tucumcari	NM	88401	507 Roy Lane	Tucumcari	NM	88401
Zeke Benavidez	6075 Quay Road AF	Tucumcari	NM	88401	501 Roy Lane	Tucumcari	NM	88401
Gloria Gonzales c/o Rushmore Loan Mana	PO Box 9214	Coppell	TX	75019	1401 E Laughlin	Tucumcari	NM	88401
Gary and Bernadette Gail Balzano	105 13 State Hwy 104	Tucumcari	NM	88401	1401 E McGee	Tucumcari	NM	88401
Alicia Rojo Trust	PO Box 524	Tucumcari	NM	88401	506 Roy Lane	Tucumcari	NM	88401
Paul Thomas and Sheila Branch	428 South First	Tucumcari	NM	88401	502 S Elder	Tucumcari	NM	88401
Paul Thomas and Sheila Branch	404 S Elder	Tucumcari	NM	88401				

DP-1874 MAILING LIST
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

Diane Thomas	PO Box 346	Tucumcari	NM	88401	1405 E McGee	Tucumcari	NM	88401
Eddy Howell c/o Lawrence Martinez	504 South Apple	Tucumcari	NM	88401	512 S Apple	Tucumcari	NM	88401
Everette and Sharon Nelson	PO Box 841	Tucumcari	NM	88401	1415 E McGee	Tucumcari	NM	88401
Mark and Jocelyn Martinez	524 Roy Place	Tucumcari	NM	88401	512 Roy Pl	Tucumcari	NM	88401
Paul and Sheila Branch	428 South First	Tucumcari	NM	88401	1601 E Laughlin	Tucumcari	NM	88401
Paul and Sheila Branch	1603 E Laughlin	Tucumcari	NM	88401				
Tommy and Helen Gilmore	518 South Apple	Tucumcari	NM	88401	518 S Apple	Tucumcari	NM	88401
Jack and Sue Ann Malone	3208 S Spring Street	Amarillo	TX	79103	1413 E McGee	Tucumcari	NM	88401
Paul and Lina Hunter	PO Box 337	Springfield	VT	05156	1421 E Laughlin	Tucumcari	NM	88401
Barri Utz	524 Apple St	Tucumcari	NM	88401				
Larry and Patricia Cooksey	915 East Heman	Tucumcari	NM	88401	524 S Apple	Tucumcari	NM	88401
Larry and Patricia Cooksey	523 S Canal Drive	Tucumcari	NM	88401				
Raquel and Gabriel Celis	3728 Riverside Parkway	Evans	CO	80620	624 S Apple	Tucumcari	NM	88401
Patrick Arellano	PO Box 109	Tucumcari	NM	88401	602 S Canal Drive	Tucumcari	NM	88401
Nelda Burson	1055 South Berry St	Tucumcari	NM	88401	418 S Apple	Tucumcari	NM	88401
Cox River Ranch LLC	402 Section Line Road	Logan	NM	88426				
Tucumcari Properties LLC	402 Section Line Road	Logan	NM	88426	1702 E McGee	Tucumcari	NM	88401
Matthew Chavez	PO Box 46	Tucumcari	NM	88401	604 S Date	Tucumcari	NM	88401
Dorothy Jean Lavender c/o Jimmy and Sar	1602 E Laughlin	Tucumcari	NM	88401	1702 E Laughlin	Tucumcari	NM	88401
Rufus and Bernice Brake	902 S Saratoga	Tucumcari	NM	88401	412 S Elder	Tucumcari	NM	88401
Rufus and Bernice Brake	314 S. Elder St	Tucucmcari	NM	88401	1724 E Hines	Tucumcari	NM	88401
Eugene and Luciana Montano	PO Box 240	Tucumcari	NM	88401	408 S Elder	Tucumcari	NM	88401
Matthew Mares	PO Box 928	Tucumcari	NM	88401				
Kathryn Hudman	310 S Elder St	Tucumcari	NM	88401				
Abel Aragon	PO Box 811	Tucumcari	NM	88401				
New Mexico State Game Commission c/o \	408 Galisteo St	Santa Fe	NM	87501				
Sears Roebuck and Co, Property Tax Comp	B2-116A PO Box 927000	Hoffman Estate	IL	60192-9901	2100 E Tucumcari Blvd	Tucumcari	NM	88401
Tucumcari ATM LLC	12121 Wilshire Blvd #900	Los Angeles	CA	90025	2100 E Route 66 Blvd	Tucumcari	NM	88401
Master Enterprises LLC	524 Chimney Hill Rd	Columbia	SC	29209				
Thomas and Elizabeth Morris	814 Mesquite	Tucumcari	NM	88401				
Estella White Family Trust	1300 South Mountain Rd	Tucumcari	NM	88401				
Ronnie Knapp	1024 South Berry	Tucumcari	NM	88401				
Patricia and Dennis Sparks	PO Box 15	Tucumcari	NM	88401	1618 E Tucumcari Blvd	Tucumcari	NM	88401
O'Reilly Automotive Stores, Inc.	PO Box 1156	Springfield	MO	65801	1300 E Tucumcari Blvd	Tucumcari	NM	88401
Ingalls Holdings LLC	PO Box 670	Roswell	NM	88202	902 S Date	Tucumcari	NM	88401
Mark Benavidez	PO Box 826	Tucumcari	NM	88401	1402 E Tucumcari Blvd	Tucumcari	NM	88401
Thomas Even	1416 East Tucumcari Blvd	Tucumcari	NM	88401	1402 E Hines	Tucumcari	NM	88401
Jacks Body Shop c/o Mark Benavidez	1414 E Tucumcari Blvd	Tucumcari	NM	88401				
Lola Jenkins c/o Jenkins Garrett Lee	311 N Lamar	Amarillo	TX	79106	1418 E Tucumcari Blvd	Tucumcari	NM	88401
Brooke Schacht	10142 State Hwy 104	Tucumcari	NM	88401	1424 E Tucumcari Blvd	Tucumcari	NM	88401
James Silver and Ellen Herold	1413 East Hines	Tucumcari	NM	88401	1413 E Hines	Tucumcari	NM	88401
Cynthia Wright	PO Box 804	Tucumcari	NM	88401	1401 E Hines	Tucumcari	NM	88401
Jai Shri Krishna Hospitality LLC	1432 Riverview Run Lane	Suwanee	GA	30024	1700 E Tucumcari Blvd	Tucumcari	NM	88401

DP-1874 MAILING LIST
YOCUM'S TEXACO, TUCUMCARI, NEW MEXICO

Yvette Yvonne Braziel Peacock	PO Box 853	Tucumcari	NM	88401	1806 E Tucumcari Blvd	Tucumcari	NM	88401
Yvette Yvonne Braziel Peacock	1824 E Hines	Tucumcari	NM	88401	1823 E Rankin	Tucumcari	NM	88401
David Lee & Cynthia Dodd	PO Box 1352	Tucumcari	NM	88401	1808 E Rankin	Tucumcari	NM	88401
David Lee & Cynthia Dodd	1002 S Saratoga	Tucumcari	NM	88401				
Scott and Margaret Ragland	1003 S Saratoga Street	Tucumcari	NM	88401	1001 S Saratoga	Tucumcari	NM	88401
Fred Lopez	1114 S Hawthorne St	Tucumcari	NM	88401	1101 S Saratoga	Tucumcari	NM	88401
Fred Lopez	1102 S Hawthorne St	Tucumcari	NM	88401	1123 S Saratoga	Tucumcari	NM	88401
Whittco Inc	PO Box 2013	Clovis	NM	88102	1702 E Tucumcari	Tucumcari	NM	88401
Robert Curtis	3478 Quay Road 72	Tucumcari	NM	88401	1102 S Saratoga	Tucumcari	NM	88401
Gutowski Anatole Trust c/o Dick Susan Har	PO Box 120	Portales	NM	88130	1804 E Tucumcari Blvd	Tucumcari	NM	88401
Victor Baum	1524 South Third	Tucumcari	NM	88401	1810 E Hines	Tucumcari	NM	88401
Jose Martinez	PO Box 318	Tucumcari	NM	88401	1008 S Hawthorne	Tucumcari	NM	88401
Paul Lindsey c/o Mark Whittington	914 S Hawthorn	Tucumcari	NM	88401				
Lateresa and Leonard Dwayne Brake	1024 South Saratoga	Tucumcari	NM	88401	1024 S Saratoga	Tucumcari	NM	88401
Lateresa and Leonard Dwayne Brake	1023 S Mountain Road	Tucumcari	NM	88401				
John and Helen Baca	1024 South Hawthorne St	Tucumcari	NM	88401	1024 S Saratoga	Tucumcari	NM	88401
Eric Shine	1023 South Saratoga	Tucumcari	NM	88401	1023 S Saratoga	Tucumcari	NM	88401

APPENDIX G – ACCESS AGREEMENT

CONSENT FOR ACCESS TO PROPERTY

Name of Property Owner: James A. Dow, Revocable Trust
Location of Property: 1823 East Tucumcari Blvd., Tucumcari, New Mexico

This is my consent to the New Mexico Environment Department (Department) and its authorized officers, employees, contractors, and representatives for access to the above-described Property for the following purposes:

Corrective action consistent with the requirements of 20.5.119 NMAC and approved by the Department. Activities may include but are not limited to the following:

- Injection of chemical compounds to remediate soil and groundwater contamination and ongoing soil and groundwater sampling, and installation and abandonment of soil borings and monitoring wells, as required.
- All work will be conducted in an efficient, courteous manner and with minimal disruption and inconvenience to the patrons, employees, agents, and representative of the Owner.

The Department or its representative will provide the Property Owner written or oral notice prior to each entrance onto Property. This notice shall be given to:

Property Owner: James A. Dow, Revocable Trust.
Owner's Address: P.O. Box 51777
City, State, Zip Code: ABQ, N. Mex 87181
Telephone: 505-239-9445
Email: Jdow10@comcast.Net

Property Owner may observe activities on the Property, consistent with Occupational Health and Safety Regulations (see 29 CFR § 1910.120). Should the property owner choose to collect and analyze split samples, the Property Owner is responsible for the provision of, and costs associated with any equipment, accessories and laboratory costs required for such split samples.

Installations on the Property will be placed to minimize interference with the movement of vehicles and regular activities on the Property. Following completion of the project, the Department or its representative will properly abandon all wells, remove equipment, all materials, trash, fencing, and other associated items. The Department or its representative will otherwise return the property as close as possible to the pre-entrance condition.

This permission is given by me voluntarily with knowledge of my right to refuse and without coercion. I have had an opportunity to ask questions and all my questions have been answered to my satisfaction.

Trustee — 11-23-18

Signature-Property Owner — Date

Jerry D. Dow