



BROWN ENVIRONMENTAL INC

6739 ACADEMY RD NE STE 254, ALBUQUERQUE, NM 87109

PH (505) 858-1818 FAX (505) 858-0707



August 2, 2012
E-Mail Transmission/Priority Mail

Mr. Jeff Scarbrough
Allsups Petroleum, Inc.
2112 Thornton Ave
Clovis, NM 88102

Ms. Renee Romero
NMED-PSTB
1914 West 2nd Street
Roswell, NM 88201

RE: COMPLETION OF DID #16460-1 INSTALLATION OF TWO DEEP COMPLETION NESTED WELLS AS PART OF A MINIMUM SITE ASSESSMENT AT THE ALLSUPS #320 FACILITY LOCATED IN CLOVIS, NEW MEXICO

Dear Ms. Romero:

On behalf of Allsups Petroleum, Inc. (Allsups), Brown Environmental, Inc. (BEI) is pleased to present to the New Mexico Environment Department-Petroleum Storage Tank Bureau (NMED) the attached corelogs/well completion diagrams documenting installation of two additional 347 foot deep nested monitor wells (BW-2 and BW-3) at the above referenced property ("the Site"). Copies of soil laboratory analytical data are also included.

We appreciate the opportunity to work for Allsups and the NMED on this project. If you have any questions regarding the material contained herein, please contact us at (505) 858-1818.

Sincerely,

Brown Environmental, Inc.

William Brown, PG

Vice President

cc: BEI Allsups 320 file w/attachments



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 30, 2012

Bill Brown
Brown Environmental Inc.
6739 Academy Road NE Suite 254
Albuquerque, NM 87109
TEL: (505) 934-7707
FAX (505) 858-0707

RE: Allsups #320

OrderNo.: 1207941

Dear Bill Brown:

Hall Environmental Analysis Laboratory received 9 sample(s) on 7/20/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207941

Date Reported: 7/30/2012

CLIENT: Brown Environmental Inc.

Client Sample ID: BW-2-158' (SM)

Project: Allsups #320

Collection Date: 7/11/2012 7:30:00 AM

Lab ID: 1207941-002

Matrix: SOIL

Received Date: 7/20/2012 3:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/23/2012 12:04:59 PM
Surr: BFB	101	69.7-121		%REC	1	7/23/2012 12:04:59 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	7/23/2012 12:04:59 PM
Benzene	ND	0.050		mg/Kg	1	7/23/2012 12:04:59 PM
Toluene	ND	0.050		mg/Kg	1	7/23/2012 12:04:59 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/23/2012 12:04:59 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/23/2012 12:04:59 PM
Surr: 4-Bromofluorobenzene	111	80-120		%REC	1	7/23/2012 12:04:59 PM

Qualifiers:

- *X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207941

Date Reported: 7/30/2012

CLIENT: Brown Environmental Inc.

Client Sample ID: BW-2-320' (SM/ML)

Project: Allsups #320

Collection Date: 7/12/2012 7:40:00 AM

Lab ID: 1207941-004

Matrix: SOIL

Received Date: 7/20/2012 3:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	9.35	5.00		mg/Kg	1	7/23/2012 1:02:36 PM
% GRO Hydrocarbons: C05-C6	5.30	0		%	1	7/23/2012 1:02:36 PM
% GRO Hydrocarbons: C06-C7	16.5	0		%	1	7/23/2012 1:02:36 PM
% GRO Hydrocarbons: C07-C8	14.1	0		%	1	7/23/2012 1:02:36 PM
% GRO Hydrocarbons: C08-C9	11.5	0		%	1	7/23/2012 1:02:36 PM
% GRO Hydrocarbons: C09-C10	16.4	0		%	1	7/23/2012 1:02:36 PM
% GRO Hydrocarbons: C10-C11	28.7	0		%	1	7/23/2012 1:02:36 PM
% GRO Hydrocarbons: C11-C12	7.20	0		%	1	7/23/2012 1:02:36 PM
% GRO Hydrocarbons: C12-C14	0.300	0		%	1	7/23/2012 1:02:36 PM
% GRO Hydrocarbons: C14+	ND	0		%	1	7/23/2012 1:02:36 PM
Surr: BFB	109	69.7-121		%REC	1	7/23/2012 1:02:36 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	7/23/2012 1:02:36 PM
Benzene	0.099	0.050		mg/Kg	1	7/23/2012 1:02:36 PM
Toluene	ND	0.050		mg/Kg	1	7/23/2012 1:02:36 PM
Ethylbenzene	0.081	0.050		mg/Kg	1	7/23/2012 1:02:36 PM
Xylenes, Total	0.40	0.10		mg/Kg	1	7/23/2012 1:02:36 PM
Surr: 4-Bromofluorobenzene	114	80-120		%REC	1	7/23/2012 1:02:36 PM

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1207941

Date Reported: 7/30/2012

CLIENT: Brown Environmental Inc.

Client Sample ID: BW-3-158' (SM)

Project: Allsups #320

Collection Date: 7/16/2012 7:45:00 AM

Lab ID: 1207941-006

Matrix: SOIL

Received Date: 7/20/2012 3:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/23/2012 3:26:40 PM
Surr: BFB	102	69.7-121		%REC	1	7/23/2012 3:26:40 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	7/23/2012 3:26:40 PM
Benzene	ND	0.050		mg/Kg	1	7/23/2012 3:26:40 PM
Toluene	ND	0.050		mg/Kg	1	7/23/2012 3:26:40 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/23/2012 3:26:40 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/23/2012 3:26:40 PM
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	7/23/2012 3:26:40 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit
 U Samples with CalcVal < MDL

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Brown Environmental Inc.

Client Sample ID: BW-3-319' (SM/ML)

Project: Allsups #320

Collection Date: 7/17/2012 7:35:00 AM

Lab ID: 1207941-008

Matrix: SOIL

Received Date: 7/20/2012 3:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/23/2012 4:24:11 PM
Surr: BFB	102	69.7-121		%REC	1	7/23/2012 4:24:11 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	7/23/2012 4:24:11 PM
Benzene	ND	0.050		mg/Kg	1	7/23/2012 4:24:11 PM
Toluene	ND	0.050		mg/Kg	1	7/23/2012 4:24:11 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/23/2012 4:24:11 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/23/2012 4:24:11 PM
Surr: 4-Bromofluorobenzene	110	80-120		%REC	1	7/23/2012 4:24:11 PM

Qualifiers: */X Value exceeds Maximum Contaminant Level.
 E Value above quantitation range
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Detection Limit
 U Samples with CalcVal < MDL

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1207941

30-Jul-12

Client: Brown Environmental Inc.

Project: Allsup #320

Sample ID	MB-2940	SampType:	MBLK	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	PBS	Batch ID:	2940	RunNo:	4376					
Prep Date:	7/20/2012	Analysis Date:	7/23/2012	SeqNo:	121848	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		102	69.7	121			

Sample ID	LCS-2940	SampType:	LCS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	LCSS	Batch ID:	2940	RunNo:	4376					
Prep Date:	7/20/2012	Analysis Date:	7/23/2012	SeqNo:	121849	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	85	115			
Surr: BFB	1100		1000		107	69.7	121			

Sample ID	1207838-001AMS	SampType:	MS	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	2940	RunNo:	4376					
Prep Date:	7/20/2012	Analysis Date:	7/23/2012	SeqNo:	121860	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	4.7	23.41	0	76.9	85.4	147			S
Surr: BFB	990		936.3		106	69.7	121			

Sample ID	1207838-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015B: Gasoline Range					
Client ID:	BatchQC	Batch ID:	2940	RunNo:	4376					
Prep Date:	7/20/2012	Analysis Date:	7/23/2012	SeqNo:	121861	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.9	24.44	0	86.7	85.4	147	16.2	19.2	
Surr: BFB	1000		977.5		104	69.7	121	0	0	

Qualifiers:

- * / X Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

Sample Log-In Check List

Client Name: **Brown Env** Work Order Number: **1207941**
 Received by/date: AT 07/20/12
 Logged By: **Anne Thorne** 7/20/2012 3:00:00 PM *Anne Thorne*
 Completed By: **Anne Thorne** 7/23/2012 *Anne Thorne*
 Reviewed By: KMS 7/23/12

Chain of Custody

- 1. Were seals intact? Yes No Not Present
- 2. Is Chain of Custody complete? Yes No Not Present
- 3. How was the sample delivered? Client

Log In

- 4. Coolers are present? (see 19. for cooler specific information) Yes No NA
- 5. Was an attempt made to cool the samples? Yes No NA
- 6. Were all samples received at a temperature of >0° C to 6.0°C Yes No NA
- 7. Sample(s) in proper container(s)? Yes No
- 8. Sufficient sample volume for indicated test(s)? Yes No
- 9. Are samples (except VOA and ONG) properly preserved? Yes No
- 10. Was preservative added to bottles? Yes No NA
- 11. VOA vials have zero headspace? Yes No No VOA Vials
- 12. Were any sample containers received broken? Yes No
- 13. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes No
- 14. Are matrices correctly identified on Chain of Custody? Yes No
- 15. Is it clear what analyses were requested? Yes No
- 16. Were all holding times able to be met? (If no, notify customer for authorization.) Yes No

of preserved bottles checked for pH: _____
 (<2 or >12 unless noted)
 Adjusted? _____
 Checked by: _____

Special Handling (if applicable)

- 17. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text"/>	Date	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

18. Additional remarks:

19. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Not Present			

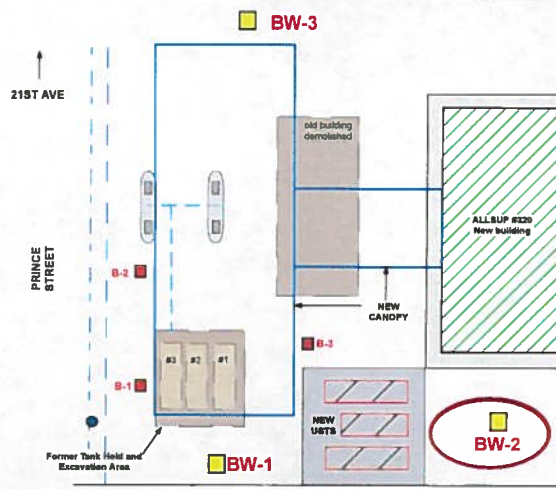
ALLSUPS #320

CLIENT: Allsup Petroleum, Inc.

Borehole ID: BW-2

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DATE OF DRILLING: 7/9/12-7/14/12
 LOGGED BY: WJB
 DRILLER: Del Leavitt/WDC
 BOREHOLE DIAMETER: 9 5/8"
 DRILLING METHOD: ARCH - Stratex / Air Rotary
 SAMPLING METHOD: Cuttings/Split Spoon
 TOP OF CASING ELEV: na
 DEPTH TO WATER: ~324'
 TOTAL DEPTH: 347.5'
 SHALLOW WELL: 2" Sched 80 PVC; Screen 122'-182'
 INTERMEDIATE WELL: 2" Sched 80 PVC; Screen 204'-264'
 DEEP WELL: 4" Sched 80 PVC; Screen 287'-347'
 SURFACE COMPLETION: 12"X12" Manway w/Concrete Pad



USCS - LITHOLOGIC DESCRIPTION

Surface Conditions: 0-6" Concrete.

0.5'-5.0' Cuttings/Posthole 0.5'-1.0' (GC/GM) Gravelly silt-clay. 1.0'-4.0' (ML/SC) Silt-very fine sand-clay mixture with localized coarser grained zones, changes to (ML) at base, (10YR) brown. 4.0'-5.0' (ML/SM) Light tan silt to very fine sand with Stage 2+ calcium carbonate, no apparent hydrocarbon odor, slightly moist throughout.

5.0'-14.0' Cuttings (ML/SC) Very fine sand-clay-silt with Stage 2 to 3 calcium carbonate, slightly moist, weakly plastic, no apparent hydrocarbon odor, light tan to white (10YR) to light brown, carbonate is variable, grades to:

14.0'-20.0' Cuttings (SM/ML) Silt to very fine sand (7.5YR) reddish-brown to light tan-red with up to Stage 2+ calcium carbonate in localized zones, locally consolidated, slightly moist, no apparent hydrocarbon odor in cuttings.

20.0'-31.0' Cuttings (SM/ML) As above but (7.5YR) reddish brown with only minor calcium carbonate, slightly moist, no apparent hydrocarbon odor in cuttings.

31.0'-37.5' Cuttings (SM) (7.5YR to 5YR) Reddish-yellow very fine silty sand, unconsolidated with ~5% cemented sandstone clasts, slightly moist, no apparent hydrocarbon odor in cuttings, grades to (SM/ML) silt to very fine sand at base.

37.5'-39.5' Split Spoon 2.0' sample. (SM/ML) As above (7.5YR) unconsolidated, massive, silt to very fine sand with ~5% calcium carbonate cemented nodules to 1" across, slightly moist, no apparent hydrocarbon odor.

39.5'-49.0' Cuttings (SM/ML) As above with Stage 2 calcium carbonate zone from ~42'-44', otherwise 5-10% calcium carbonate nodules in silt to very fine sand matrix.

49.0'-62.0' Cuttings (SM/ML) Unconsolidated, little or no calcium carbonate, slightly moist.

62.0'-66.5' Cuttings Caliche, Stage 3+ to 4 cemented calcium carbonate with (SM/ML) matrix, top has greatest cement, no apparent hydrocarbon odor in cuttings, white to light tan.

66.5'-68.0' Cuttings (SM/ML) calcium carbonate cement decreases with depth, light brown.

68.0'-77.5' Cuttings (SM) Silty very fine to fine sand (10YR) light brown, unconsolidated, slightly moist, no apparent hydrocarbon odor in cuttings, grades to (SM/ML) at base.

Construction Data	Borehole/Monitor Well Construction	Laboratory Sample b=benzene m=mtbe TPH=TPH gas range	PID Reading (ppm)/ Lab Sample (ppm)	Depth (in feet)	Sample Interval	Simplified Lithology
6%94% Bentonite Cement Grout (remixed in multiple lifts)	4" casing 2" casing 2" casing	no=no odor to=trace odor wo=weak odor mo=moderate odor so=strong odor		5	≥1.9 no	
				10	≥1.6 no	
				15	≥1.5 no	
				20	≥1.0 no	
				25	≥0.8 no	
				30	≥0.9 no	
				35	≥0.7 no	
				40	≥0.2 no	
				45	≥0.4 no	
				50	≥0.5 no	
				55	≥0.5 no	
				60	≥0.1 no	
				65	caliche zone ≥0.3 no	
				70	≥0.5 no	



BROWN ENVIRONMENTAL, INC

6739 ACADEMY ROAD, NE. SUITE 254, ALBUQUERQUE, NEW MEXICO 87109

PHONE: (505) 858-1818 FAX: (505) 858-0707

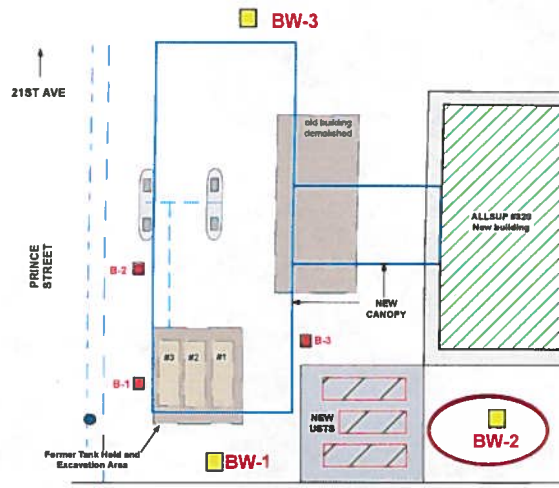
ALLSUPS #320

CLIENT: Allsup Petroleum, Inc.

Borehole ID: BW-2

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DATE OF DRILLING: 7/9/12-7/14/12
 LOGGED BY: WJB
 DRILLER: Del Leavitt/WDC
 BOREHOLE DIAMETER: 9 5/8"
 DRILLING METHOD: ARCH - Stratex / Air Rotary
 SAMPLING METHOD: Cuttings/Split Spoon
 TOP OF CASING ELEV: na
 DEPTH TO WATER: ~324'
 TOTAL DEPTH: 347.5'
 SHALLOW WELL: 2" Sched 80 PVC; Screen 122'-182'
 INTERMEDIATE WELL: 2" Sched 80 PVC; Screen 204'-264'
 DEEP WELL: 4" Sched 80 PVC; Screen 287'-347'
 SURFACE COMPLETION: 12"X12" Manway w/Concrete Pad



USCS - LITHOLOGIC DESCRIPTION

Construction Data	Borehole/Monitor Well Construction	Laboratory Sample b=benzene m=mtbe TPH=TPH gas range	PID Reading (ppm)/ Lab Sample (ppm)	Depth (in feet) Sample Interval	Simplified Lithology
	4" casing 2" casing 2" casing			75	
			≥0.4 no	75	
			≥0.4 no	80	
				85	
			≥1.4 no	85	
			≥0.5 no	90	
			≥0.4 no	95	
			≥0.6 no	100	
			≥0.8 no	105	
			≥0.3 no	110	
			≥0.6 no	115	
			≥0.7 no	120	
			≥0.4 no	125	
			≥0.2 no	130	
			≥0.3 no	135	
			≥0.5 no	140	
			≥0.2 no	145	

77.5'-78.7' Split Spoon 1.2' sample. (SM/ML) (7.5YR) Reddish yellow silty very fine sand, unconsolidated sand for ~5-10% calcium carbonate cemented nodules, slightly moist, no apparent hydrocarbon odor in cuttings.

78.7'-81.0' Cuttings (SM/ML) As above.

81.0'-111.0' Cuttings (SM) Light brownish to yellow very fine sand with trace silt, unconsolidated, slightly moist, overall with localized moist zones at 86'-92' and 97'-110', no apparent hydrocarbon odor in cuttings.

111.0'-115.0' Cuttings (SM/ML) Silty very fine sand (10YR) light brown to yellow, abundant calcium carbonate cemented sandstone nodules in top foot, slightly moist, no apparent hydrocarbon odor in cuttings.

115.0'-117.5' Cuttings (SM) As above.

117.5'-118.5' Split Spoon 1.1' sample. (SM) (10YR) Light brown-yellow very fine to fine sand with trace silt, unconsolidated, slightly moist, no apparent hydrocarbon odor, more calcium carbonate nodules.

118.5'-131.0' Cuttings (SM) Very fine to fine sand with trace silt, (10YR), light brown-yellow, slightly moist to moist, unconsolidated, no apparent hydrocarbon odor in cuttings, weakly cemented calcium carbonate nodules from 120'-122'.

131.0'-157.5' Cuttings (SM) Light brown-yellow (10YR), unconsolidated (?), minor disseminated calcium carbonate in this zone, less moisture than above, very fine sand with trace silt, no apparent hydrocarbon odor in cuttings.



BROWN ENVIRONMENTAL, INC

6799 ACADEMY ROAD, NE SUITE 254, ALBUQUERQUE, NEW MEXICO 87109
 PHONE: (505) 858-1818 FAX: (505) 858-0707

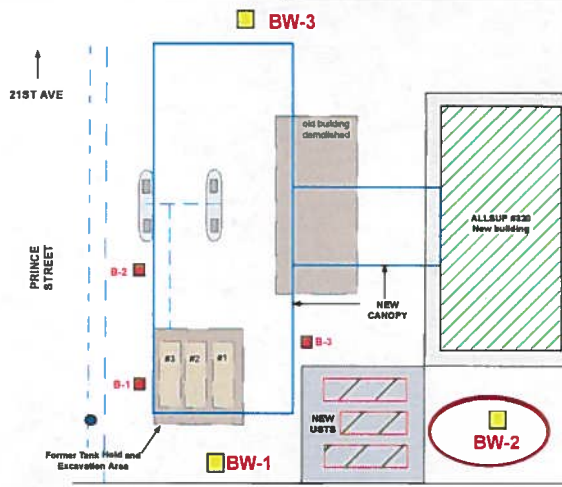
ALLSUPS #320

CLIENT: Allsups Petroleum, Inc.

Borehole ID: BW-2

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DATE OF DRILLING: 7/9/12-7/14/12
 LOGGED BY: WJB
 DRILLER: Del Leavit/WDC
 BOREHOLE DIAMETER: 9 5/8"
 DRILLING METHOD: ARCH - Stratex / Air Rotary
 SAMPLING METHOD: Cuttings/Split Spoon
 TOP OF CASING ELEV: na
 DEPTH TO WATER: ~324'
 TOTAL DEPTH: 347.5'
 SHALLOW WELL: 2" Sched 80 PVC; Screen 122'-182'
 INTERMEDIATE WELL: 2" Sched 80 PVC; Screen 204'-264'
 DEEP WELL: 4" Sched 80 PVC; Screen 287'-347'
 SURFACE COMPLETION: 12"X12" Manway w/Concrete Pad



USCS - LITHOLOGIC DESCRIPTION

Construction Data	Borehole/ Monitor Well Construction	Laboratory Sample b=benzene m=mtbe TPH=TPH gas range	PID Reading (ppm)/ Lab Sample (ppm)	Depth (in feet)	Simplified Lithology
0.02 Slot Screen 2" Dia. Sched 80 PVC				225	
10-20 Silica Sand				230	
				235	
				240	
				245	
				250	
				255	
				260	
6%/94% Bentonite Cement Grout tremied into hole and allowed to setup				265	
3/8" Hydrated Bentonite Pellets in 2 lifts				270	
				275	
				280	
				285	
				290	
0.01 Slot Screen 4" Dia. Sched 80 PVC				295	
				300	
				305	
				310	
				315	
				320	
				325	
				330	
				335	
				340	
				345	
				347.5	

237.5'-238.5' Split Spoon 1.0' sample. (10YR) Light tan to brown very fine to fine sand with trace silt, well sorted, unconsolidated, slightly moist, no calcium carbonate nodules, trace h/c odor.

246.0'-256.0' Cuttings (SM) Light tan to brown (10YR) very fine to fine sand with trace silt, ~5-10% calcium carbonate cemented sandstone nodules rounded to 1" across, no apparent hydrocarbon odor in cuttings, slightly moist.

256.0'-257.5' Cuttings (SM) Very fine sand. no apparent hydrocarbon odor in cuttings.

12:15 Stop drilling for lunch @ 257.5'. Let hole sit prior to split spoon collection.

257.5'-258.5' Split Spoon 0.7' sample. (10YR) (SM) Light tan to brown very fine sand with trace silt, well sorted, unconsolidated, slightly moist, no calcium carbonate nodules.

258.5'-266.0' Cuttings (SM) As above, slightly moist.

266.0'-287.0' Cuttings (SM) Very fine to fine sand with minor silt, more moisture than above, (10YR), light brown to tan, unconsolidated, no apparent hydrocarbon odor in cuttings.

277.5' -278.5' Split Spoon 0.8' sample. (SM) As above, no apparent hydrocarbon odor, massive, no bedding.

287.0'-311.0' Cuttings (SM) Very fine to fine sand with trace silt, (10YR) tan to brown with only minor moisture content, slightly moist, unconsolidated, no apparent hydrocarbon odor, (SM/ML) zone from 296' to ~300' depth, silt to very fine sand mixture, slightly moist to moist.

297.5' -299.0' Split Spoon 1.3' sample. (SM/ML) Silt to very fine sand, (10YR), brownish-yellow, unconsolidated, slightly moist to moist with localized Stage 1 calcium carbonate, no apparent hydrocarbon odor.



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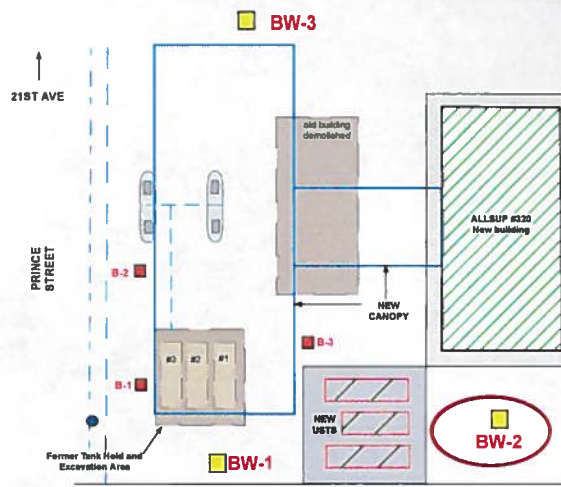
ALLSUPS #320

CLIENT: Allsup Petroleum, Inc.

Borehole ID: BW-2

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DATE OF DRILLING: 7/9/12-7/14/12
 LOGGED BY: WJB
 DRILLER: Del Leavitt/WDC
 BOREHOLE DIAMETER: 9 5/8"
 DRILLING METHOD: ARCH - Stratex / Air Rotary
 SAMPLING METHOD: Cuttings/Split Spoon
 TOP OF CASING ELEV: na
 DEPTH TO WATER: ~324'
 TOTAL DEPTH: 347.5'
 SHALLOW WELL: 2" Sched 80 PVC; Screen 122'-182'
 INTERMEDIATE WELL: 2" Sched 80 PVC; Screen 204'-264'
 DEEP WELL: 4" Sched 80 PVC; Screen 287'-347'
 SURFACE COMPLETION: 12"X12" Manway w/Concrete Pad



USCS - LITHOLOGIC DESCRIPTION

Construction Data	Borehole/ Monitor Well Construction	Laboratory Sample b=benzene m=mtbe TPH=TPH gas range	PID Reading (ppm)/ Lab Sample (ppm)	Depth (in feet)	Sample Interval	Simplified Lithology
0.02 Slot Screen 2" Dia. Sched 80 PVC				150		
10-20 Silica Sand				155		
				160		
				165		
				170		
				175		
				180		
6%/94% Bentonite Cement Grout tremied into hole and allowed to setup				185		
				190		
3/8" Hydrated Bentonite Pellets				195		
				200		
0.02 Slot Screen 2" Dia. Sched 80 PVC				205		
				210		
				215		
				220		

157.5'-158.5' Split Spoon 0.8' sample. Entire core is (SM) light brown yellow (10YR) very fine sand with trace silt and fine sand, unconsolidated, slightly moist, no apparent hydrocarbon odor in cuttings.

158.5'-190.0' Cuttings (SM) As above, higher moisture content than above.

190.0'-192.0' Cuttings Weakly cemented (SM) nodules, breaks easily in hand.

192.0'-197.5' Cuttings (SM) Silty very fine sand, firmer than above with less moisture, (10YR) light tan brown, no apparent hydrocarbon odor in cuttings, unconsolidated.

197.5'-199.0' Split Spoon 1.4' sample. (SM) As above, unconsolidated, slightly moist silty very fine sand (10YR), light tan-brown, trace to weak hydrocarbon odor in cuttings, calcium carbonate in localized areas.

199.0'-246.0' Cuttings Same as above with generally less moisture, slightly moist, (10YR) light tan to brown, no apparent hydrocarbon odor in cuttings, locally minor calcium carbonate cemented clasts.

217.5'-219' Split Spoon 1.4' sample. Entire core is (SM) light brown (10YR) very fine to fine sand with trace silt, unconsolidated, slightly moist, no apparent hydrocarbon odor in cuttings.



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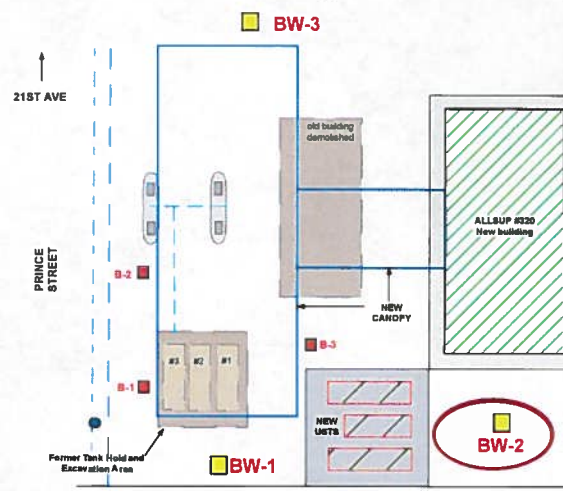
ALLSUPS #320

CLIENT: Allsup Petroleum, Inc.

Borehole ID: BW-2

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DATE OF DRILLING: 7/9/12-7/14/12
 LOGGED BY: WJB
 DRILLER: Del Leavitt/WDC
 BOREHOLE DIAMETER: 9 5/8"
 DRILLING METHOD: ARCH - Stratex / Air Rotary
 SAMPLING METHOD: Cuttings/Split Spoon
 TOP OF CASING ELEV: na
 DEPTH TO WATER: ~324'
 TOTAL DEPTH: 347.5'
 SHALLOW WELL: 2" Sched 80 PVC; Screen 122'-182'
 INTERMEDIATE WELL: 2" Sched 80 PVC; Screen 204'-264'
 DEEP WELL: 4" Sched 80 PVC; Screen 287'-347'
 SURFACE COMPLETION: 12"X12" Manway w/Concrete Pad



USCS - LITHOLOGIC DESCRIPTION

Construction Data	Borehole/ Monitor Well Construction	Laboratory Sample b=benzene m=mtbe TPH=TPH gas range	PID Reading (ppm)/ Lab Sample (ppm)	Depth (in feet)	Simplified Lithology	
10-20 Silica Sand			≥0.3 no	303		
			≥0.4 no	305		
			≥0.2 no	310		
			≥0.0 no	315		
			≥2.9 on 1st spoon ≥340 mo on 2nd spoon	320		
			383 ppm/v on off gas			
0.01 Slot Screen 4" Dia. Sched 80 PVC				≥0.7 no	325	
				≥0.2 no	330	
				≥0.8 no	335	
				≥1.4 no	340	
				≥0.7 no	345	
					350	
					355	
					360	
					365	
				370		
				total depth = 347.5'		

311.0'-317.0' Cuttings (SM) (10YR) Light tan to brown silty very fine to fine sand, similar to above but with minor calcium carbonate cemented clasts and greater moisture, no apparent hydrocarbon odor.

317.0'-319.0' Cuttings (SM/ML) Greater silt content.

319.0'-320.5' Split Spoon #1 - 1.3' (SM/ML) Silt to very fine sand mixture with minor (ML) stratification, coarsens with depth, slightly moist to moist, trace localized calcium carbonate Stage 1+, no apparent hydrocarbon odor.

Allowed hole to sit overnight before collecting 2nd sample.

319.0'-320.5' Split Spoon #2 - 1.4' (SM/ML) Collected after letting hole sit overnight. 1.4' sample. (SM/ML) Silt to very fine sand with minor (ML) stratification, coarsens with depth, weak to moderate hydrocarbon gasoline odor, moist.

7/12/12 Blew out hole at 7:58 after letting sit all night PID ≤ 383 ppm/v on offgas; concentrations dropped off rapidly.

320.5'-324' Cuttings (SM/ML) As above grading to:

324' - 333' Cuttings (SM) very fine to fine sand with trace silt (10YR) light tan to brown, unconsolidated, moist to water saturated below 324'

329.0'-334.0' Cuttings Localized calcium carbonate cemented zones as shown on graphic log.

334.0'-337.5' Cuttings (SM/ML) and (SM) zones with lesser/greater silt content, very fine sand is most abundant throughout, water saturated, no apparent hydrocarbon odor.

337.5'-339.5' Split Spoon 1.9' sample. (SM/ML) Silt to very fine sand mixture, (10YR) brown, water saturated, unconsolidated, no apparent hydrocarbon odor, no apparent bedding, localized sandstone clast to 1" across with calcium carbonate cement, dense.

339.5'-342.0' Cuttings (SM/ML) As above.

342.0'-347.5' Cuttings (SM) Silty very fine sand with interbeds of cemented sandstone (SAS) and (SM/ML) Silt to very fine sand. Entire interval is (10YR) brown, water saturated.



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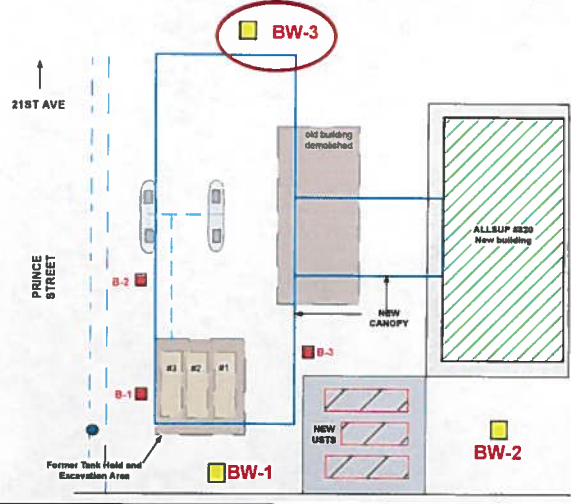
ALLSUPS #320

CLIENT: Allsup Petroleum, Inc.

Borehole ID: BW-3

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DATE OF DRILLING: 7/14/12-7/19/12
 LOGGED BY: WJB
 DRILLER: Del Leavitt/WDC
 BOREHOLE DIAMETER: 9 5/8"
 DRILLING METHOD: ARCH - Stratex / Air Rotary
 SAMPLING METHOD: Cuttings/Split Spoon
 TOP OF CASING ELEV: na
 DEPTH TO WATER: ~324'
 TOTAL DEPTH: 347'
 SHALLOW WELL: 2" Sched 80 PVC; Screen 125'-185'
 INTERMEDIATE WELL: 2" Sched 80 PVC; Screen 205'-265'
 DEEP WELL: 4" Sched 80 PVC; Screen 287'-347'
 SURFACE COMPLETION: 12"X12" Manway w/Concrete Pad



USCS - LITHOLOGIC DESCRIPTION

Construction Data	Borehole/Monitor Well Construction	Laboratory Sample b=benzene m=metane TPH=TPH gas range	PID Reading (ppm)/ Lab Sample (ppm)	Depth (in feet)	Sample Interval	Simplified Lithology
0.02 Slot Screen 2" Dia. Sched 80 PVC				≥0.4 no	150	
				≥0.5 no	155	
				≥7.6 wo	158.5	
				≥2.2 no	160	
				≥1.6 no	165	
				≥1.7 no	170	
				≥1.3 no	175	
				≥1.5 no	180	
				≥1.7 no	185	
				≥1.7 no	190	
				≥1.7 no	195	
		47 ppm/v w-mo			200	
				≥5.1 no	205	
				≥4.2 no	210	
					215	
				≥6.4 no	220	
				≥5.5 wo	220	
				≥4.1 no		

7/15/12 @ 17:50 157.5' Stop drilling for today

7/16/12 @ 17:45 Blow down from hole = 58 ppm/v with light gasoline odor.

157.5'-158.5' Split Spoon 0.7' sample. 0.0'-0.7' (SM) Silty very fine grained sand with some calcium carbonate cementation in layers, slightly moist to moist, weak hydrocarbon odor.

158.5'-208.0' Cuttings (SM) Tan to brown (10YR) very fine to fine sand with minor silt, some calcium carbonate lightly cemented nodules, slightly moist to moist, no apparent hydrocarbon odor in cuttings, some zones have more moisture as outlined below.

175'-195' Moist zone.

197.5'-198.5' Split Spoon 0.8' sample. Entire core is (SM) silty very fine to fine grained sand (7.5YR) reddish brown to tan, unconsolidated to partially cemented with minor calcium carbonate cement, slightly moist to moist, weak hydrocarbon odor. Note: Hole sat for ~30 minutes prior to collection and use of air.

208.0'-249.0' Cuttings (SM/ML) Reddish brown (7.5YR) silt to very fine sand, moist, unconsolidated, no apparent hydrocarbon odor in cuttings, trace calcium carbonate cemented nodules.

217.5'-218.5' Split Spoon 0.9' sample. 0.0'-0.9' (SM/ML) Silt to very fine sand with several large calcium carbonate cement nodules to 1" across, otherwise massive, unconsolidated silt to sand (7.5YR) reddish-brown, fairly moist, weak hydrocarbon odor.



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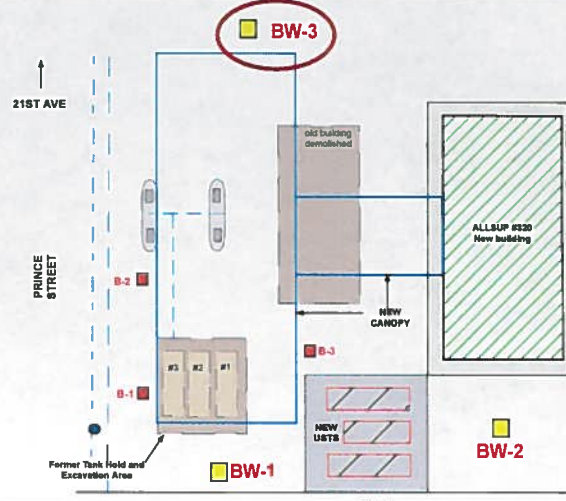
ALLSUPS #320

CLIENT: Allsup Petroleum, Inc.

Borehole ID: BW-3

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DATE OF DRILLING: 7/14/12-7/19/12
 LOGGED BY: WJB
 DRILLER: Del Leavitt/WDC
 BOREHOLE DIAMETER: 9 5/8"
 DRILLING METHOD: ARCH - Stratex / Air Rotary
 SAMPLING METHOD: Cuttings/Split Spoon
 TOP OF CASING ELEV: na
 DEPTH TO WATER: ~324'
 TOTAL DEPTH: 347'
 SHALLOW WELL: 2" Sched 80 PVC; Screen 125'-185'
 INTERMEDIATE WELL: 2" Sched 80 PVC; Screen 205'-265'
 DEEP WELL: 4" Sched 80 PVC; Screen 287'-347'
 SURFACE COMPLETION: 12"X12" Manway w/Concrete Pad



USCS - LITHOLOGIC DESCRIPTION

Construction Data	Borehole/ Monitor Well Construction	Laboratory Sample b=benzene m=metane TPH=TPH gas range	PID Reading (ppm)/ Lab Sample (ppm)	Depth (in feet)	Simplified Lithology
0.02 Slot Screen 2" Dia. Sched 80 PVC				225	
				230	
				235	
10-20 Silica Sand		BW-3 239' (SM/ML) B=nd M=nd T=nd		240	
				245	
				250	
				255	
				260	
				265	
6%94% Bentonite Cement Grout tremied into hole and allowed to setup				270	
				275	
				280	
3/8" Hydrated Bentonite Pellets in 2 lifts				285	
				290	
0.01 Slot Screen 4" Dia. Sched 80 PVC				295	
				300	
				305	
				310	
				315	
				320	
				325	
				330	
				335	
				340	
				345	
				350	

237.5' Rig down for ~80 minutes to replace drive head top seal and repair engine oil leak.

237.5'-239.0' Split Spoon 1.4' sample. Entire core is (SM/ML) light tan to brown (10YR) silt to very fine sand, unconsolidated, slightly moist, no apparent hydrocarbon odor.

Blowdown on hole @ 90 minutes = 13 ppm/v.

240.0'-249.0' Cuttings ~10% rounded calcium carbonate cemented nodules in (SM/ML) or (SM) matrix.

249.0'-257.5' Cuttings (SM) Tan to brown (10YR) very fine to fine sand with minor silt, unconsolidated, some moisture, no apparent hydrocarbon odor in cuttings.

257.5'-258.5' Split Spoon 0.9' sample. Entire core is (SM) (10YR) tan to brown very fine to fine sand with minor silt, unconsolidated, slightly moist to moist, a few small calcium carbonate cemented (SM) concretions, no apparent hydrocarbon odor.

262.0'-288.0' Cuttings ~5-10% rounded carbonate cemented nodules to 1" across. No apparent hydrocarbon odor in cuttings

277.5' Stop drilling - rig breakdown.

Note: Higher PID readings below ~250' due in part to the presence of concretions/calcium carbonate nodules in cuttings which are more resistant to aeration during air rotary retrieval process.

277.5'-278.0' Split Spoon 0.5' sample with refusal at base. 0.0'-0.2' (SM) As above. 0.2'-0.5' (SAS) Hard carbonate cemented very fine sandstone, light tan to gray. Collected this split spoon after allowing hole to sit for 60 minutes.

Blowdown on hole = 22.1 ppm/v

278.0'-289.0' Cuttings (SM) As above.

289.0'-301.0' Cuttings (SM/ML) Tan to brown (10YR) silt - very fine sand, locally cemented with calcium carbonate, as (SST/SAS) siltstone to very fine sandstone, slightly moist, no apparent hydrocarbon odor in cuttings.

297.5'-298.0' Split Spoon 0.4' sample. 0.0'-0.1' (SM/ML) As above with some disseminated calcium carbonate, massive. 0.1'-0.4' (SAS/SST) Siltstone to very fine sandstone, calcium carbonate, indurated, spoon refusal.



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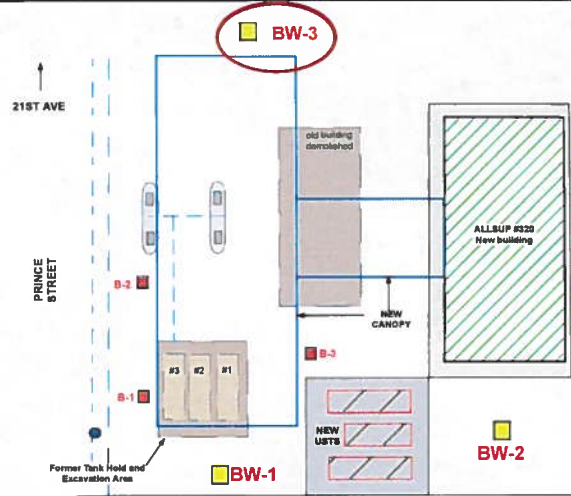
ALLSUPS #320

CLIENT: Allsup Petroleum, Inc.

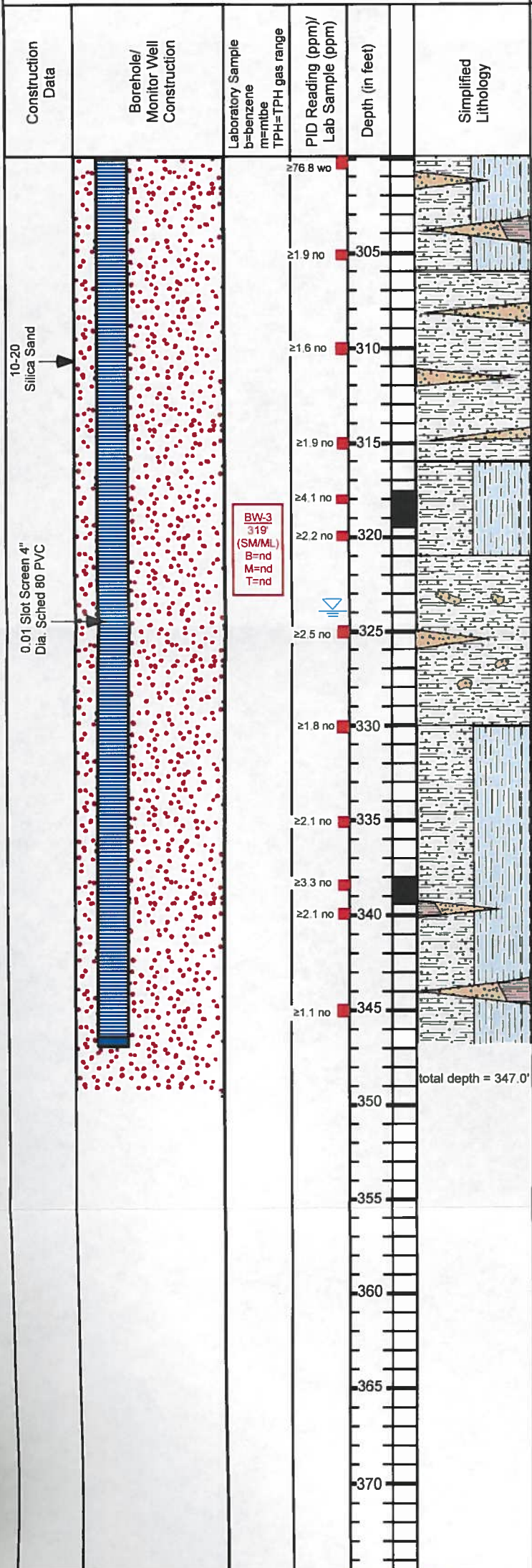
Borehole ID: BW-3

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DATE OF DRILLING: 7/14/12-7/19/12
 LOGGED BY: WJB
 DRILLER: Del Leavitt/WDC
 BOREHOLE DIAMETER: 9 5/8"
 DRILLING METHOD: ARCH - Stratex / Air Rotary
 SAMPLING METHOD: Cuttings/Split Spoon
 TOP OF CASING ELEV: na
 DEPTH TO WATER: ~324'
 TOTAL DEPTH: 347'
 SHALLOW WELL: 2" Sched 80 PVC; Screen 125'-185'
 INTERMEDIATE WELL: 2" Sched 80 PVC; Screen 205'-265'
 DEEP WELL: 4" Sched 80 PVC; Screen 287'-347'
 SURFACE COMPLETION: 12"X12" Manway w/Concrete Pad



USCS - LITHOLOGIC DESCRIPTION



301.0'-306.0' Cuttings (SM/ML) As above, ~10% (SAS/SST) nodules, localized thin (SAS/SST).

306.0'-316.0' Cuttings (SM) Tan to brown (10YR) silty very fine to fine sand, unconsolidated with localized thin (SAS) very fine sandstone layers ≤2" thick, decreases below 312' moist, no apparent hydrocarbon odor in cuttings.

317.5' Stop drilling for 7-16-12 at 13:20 will collect split spoon tomorrow morning.

7/17/12 at 7:35 collected split spoon @ 317.5'-319.5' Blowdown from hole = 187ppm/v.

317.5'-319.5' Split Spoon 1.9' sample. Entire core is (SM/ML), tan to brown (10YR) silty to very fine sand, unconsolidated with ~5% rounded calcium carbonate cemented nodules to 3/4", moist, especially at base, no apparent hydrocarbon odor in cuttings.

319.5'-321.0' Cuttings (SM/ML) bordering on (SM), silty very fine sand, moist, no apparent hydrocarbon odor.

321.0'-330.0' Cuttings (SM) bordering on (SM/ML) silty very fine sand, unconsolidated, moist to wet below ~324', no apparent hydrocarbon odor in cuttings. (10YR) light tan to brown, ~5-10% calcium carbonate cemented nodules in localized intervals, possibly thin (SAS) zones.

330.0'-347.0' Cuttings (SM/ML) Silt - very fine sand, medium brown (10YR), darker brown than above with greater silt content, water saturated, unconsolidated, trace calcium carbonate nodules in top half, in lower half localized zones up to 10% of interval, likely thin (SAS/SST) zones. No apparent hydrocarbon odor in cuttings.



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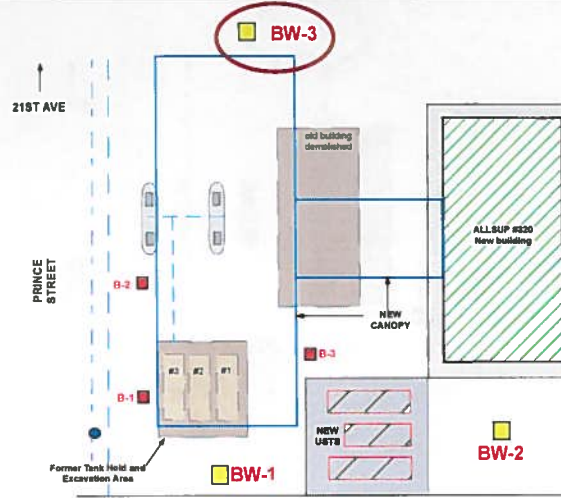
ALLSUPS #320

CLIENT: Allsup Petroleum, Inc.

Borehole ID: BW-3

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DATE OF DRILLING: 7/14/12-7/19/12
 LOGGED BY: WJB
 DRILLER: Del Leavitt/WDC
 BOREHOLE DIAMETER: 9 5/8"
 DRILLING METHOD: ARCH - Stratex / Air Rotary
 SAMPLING METHOD: Cuttings/Split Spoon
 TOP OF CASING ELEV: na
 DEPTH TO WATER: ~324'
 TOTAL DEPTH: 347'
 SHALLOW WELL: 2" Sched 80 PVC; Screen 125'-185'
 INTERMEDIATE WELL: 2" Sched 80 PVC; Screen 205'-265'
 DEEP WELL: 4" Sched 80 PVC; Screen 287'-347'
 SURFACE COMPLETION: 12"X12" Manway w/Concrete Pad



USCS - LITHOLOGIC DESCRIPTION

Construction Data	Borehole/ Monitor Well Construction	Laboratory Sample b=benzene m=mercaptane TPH=TPH gas range	PID Reading (ppm)/ Lab Sample (ppm)	Depth (in feet)	Sample Interval	Simplified Lithology
6% 94% Bentonite Cement Grout (trimmed in multiple lifts) 4" casing 2" casing 2" casing 10-20 Silica Sand 3/8" Hydrated Bentonite Pellets	4" casing 2" casing 2" casing	no=no odor t=trace odor w=weak odor m=moderate odor s=strong odor		≥2.2 no	5	
				≥1.8 no	10	
				≥1.1 no	15	
				≥0.8 no	20	
				≥1.2 no	25	
				≥1.3 no	30	
				≥2.0 no	35	
				≥3.1 no	40	
				≥2.8 no	45	
				≥1.9 no	50	
				≥0.8 no	55	
				≥0.9 no	60	
				≥0.7 no	65	
				≥1.0 no	70	

Surface Conditions: 0-0.5' Reinforced concrete.

0.5'-5.0' Posthole 0.5'-5.0' Postholed to clear for utilities, dark brown (10YR) (SM/SC), clayey very fine sand and (SM/ML) silt to very fine sand, slightly moist, no apparent hydrocarbon odor.

5.0'-21.0' Cuttings (SC/ML) Clay-silt-very fine sand mixture with localized coarser grained (SM/ML) zones, brown (10YR) slightly moist, Stage 1+ calcium carbonate, no apparent hydrocarbon odor.

21.0'-37.0' Cuttings Stage 3 to 4 pedogenic carbonate; matrix is (SM/ML) silt to very fine sand, light tan to light brown-tan, indurated, slightly moist, no apparent hydrocarbon odor.

37.0'-40.0' Cuttings (SM/ML) with Stage 2 to 3 calcium carbonate lessening with depth, slightly moist, no apparent hydrocarbon odor, light brown (10YR), unable to collect split spoon in this zone.

40.0'-47.5' Cuttings (SM/ML) (7.5YR) Reddish yellow silt-very fine sand, unconsolidated with localized calcium carbonate nodules, slightly moist, no apparent hydrocarbon odor.

47.5'-49.0' Split Spoon 1.4' sample. 0.0'-1.4' (7.5YR) Reddish-yellow (SM/ML) silty very fine sand, unconsolidated with ≤5% weakly cemented nodules to 3/4" across, slightly moist, no apparent hydrocarbon odor, massive.

49.0'-60.0' Cuttings (SM/ML) As above grading to (SM) silty very fine sand with depth, abundant (10%) calcium carbonate cemented nodules increasing with depth, (7.5YR) reddish-yellow, slightly moist, no apparent hydrocarbon odor in cuttings.

60.0'-66.0' Cuttings Stage 4 to 3 laminar pedogenic calcium carbonate, very hard locally to lesser cemented zones with (SM/ML) silt to very fine sand matrix, no apparent hydrocarbon odor in cuttings, light tan to white, grades to Stage 2 calcium carbonate at base.

66.0'-77.5' Cuttings (SM/ML) Silty very fine sand, moist to slightly moist, unconsolidated, trace ≤1/2" calcium carbonate nodules, (10YR), brown to tan, no apparent hydrocarbon odor in cuttings.



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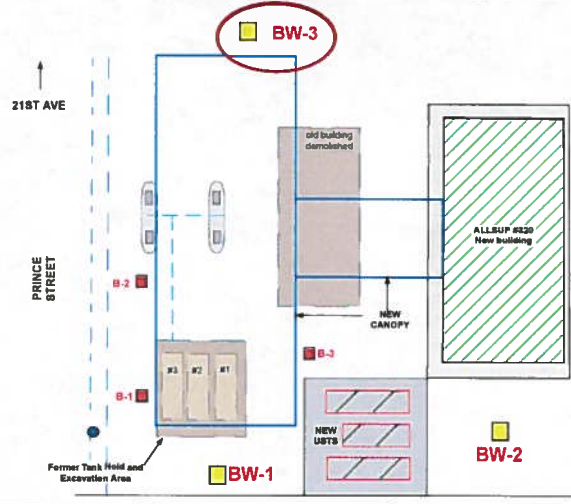
ALLSUPS #320

CLIENT: Allsup Petroleum, Inc.

Borehole ID: BW-3

page 2 of 5

DATE OF DRILLING: 7/14/12-7/19/12
 LOGGED BY: WJB
 DRILLER: Del Leavitt/WDC
 BOREHOLE DIAMETER: 9 5/8"
 DRILLING METHOD: ARCH - Stratex / Air Rotary
 SAMPLING METHOD: Cuttings/Split Spoon
 TOP OF CASING ELEV: na
 DEPTH TO WATER: ~324'
 TOTAL DEPTH: 347'
 SHALLOW WELL: 2" Sched 80 PVC; Screen 125'-185'
 INTERMEDIATE WELL: 2" Sched 80 PVC; Screen 205'-265'
 DEEP WELL: 4" Sched 80 PVC; Screen 287'-347'
 SURFACE COMPLETION: 12"X12" Manway w/Concrete Pad



USCS - LITHOLOGIC DESCRIPTION

Construction Data	Borehole/Monitor Well Construction	Laboratory Sample b=benzene m=mtbe TPH=TPH gas range	PID Reading (ppm)/ Lab Sample (ppm)	Depth (in feet)	Sample Interval	Simplified Lithology
	4" casing			75		
	2" casing			80		
	2" casing			85		
				90		
				95		
				100		
				105		
				110		
				115		
				120		
				125		
				130		
				135		
				140		
				145		

77.5'-79.5' Split Spoon 2.0' sample. (SM/ML) (10YR) Light brown to tan silt to very fine sand, slightly moist to moist, unconsolidated, no apparent hydrocarbon odor in cuttings, massive, no bedding, only trace calcium carbonate.

79.5'-81.0' Cuttings (SM/ML) As above, slightly moist.

81.0'-107.5' Cuttings (SM) Light tan brown (10YR) silty very fine to fine grained sand, unconsolidated, slightly moist to moist, trace 1/2" diameter calcium carbonate cemented clasts, no apparent hydrocarbon odor in cuttings

107.5'-108.5' Split Spoon 0.9' sample. 0.0'-0.6' (SM/ML) With Stage 2+ calcium carbonate cement, slightly moist to moist, light brown at top grading to light tan at base, no apparent hydrocarbon odor in cuttings.

108.5'-111.0' Cuttings (SM/ML) With some calcium carbonate, grading to:

111.0'-139.0' Cuttings (SM) Light tan to brown (10YR), very fine to fine sand with trace silt, coarser grained than above, slightly moist to moist, no apparent hydrocarbon odor in cuttings, unconsolidated, trace calcium carbonate nodules to 1/2", poorly cemented when present.

139.0'-146.0' Cuttings (SM/ML) Light brown to tan (10YR), silt to very fine sand, unconsolidated, slightly moist - less moisture than surrounding zones, no apparent hydrocarbon odor in cuttings.

146.0'-157.5' Cuttings (SM) Light tan to brown (10YR), very fine to fine sand with trace silt as above, slightly moist to moist, unconsolidated, no apparent hydrocarbon odor in cuttings.



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