

Schlumberger

Reservoir Development
Schlumberger Drilling and Measurements
9200 West Reno Avenue
Oklahoma City, Oklahoma 73127 USA
Phone: (405) 789-1515
Fax: (405) 789-1519

December 16, 2015

OXY USA WTP LP
5 Greenway Plaza Suite 110
Houston, TX 77046

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 02 2016

Re:

CLIENT: OXY USA WTP LP
WELL: Misty 35 Federal Com #3H
FIELD: Leo; Bone Spring, South
RIG: Can Elson #46
COUNTY: Eddy
API NO: 30-015-41416
JOB NO: 15MLD2658

Sec 35, T18S, R30E Eddy, NM
N 32.69805 W 103.93396

RECEIVED

Enclosed, please find the original copy of the survey performed on the referenced well by PathFinder, a division of Schlumberger Technology Corporation.

Other information required by your office is as follows:

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Kurt Valentine MWD	Misty 35 Federal Com #3H Original Hole	467.00 Ft to 13237.00 Ft	November 1, 2015 to November 20, 2015	SlimPulse

If any other information is required, please contact the undersigned at the above letterhead and phone number.
Sincerely,

Alexander Paharsingh
Field Service Manager

Reservoir Development
Schlumberger Drilling and Measurements
9200 West Reno Avenue
Oklahoma City, Oklahoma 73127 USA
Phone: (405) 789-1515
Fax: (405) 789-1519



Well Reference:

Sec135 T18S R30E SESE 550FSL 120FEL
N 32.69805 W 103.93396

I, Kurt Valentine certify that: I am employed by Schlumberger Drilling and Measurements; that I did on the day(s) of November 01, 2015 through November 20, 2015, conduct or supervise the taking of the SlimPulse surveys from a depth of 467.00 feet to a depth of 13237.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Schlumberger Drilling and Measurements; that I am authorized and qualified to make this report; that this survey W71 request of OXY USA WTP LP for the Misty 35 Federal 3H Well (Original Hole) API No. 30-015-41416 and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Schlumberger Drilling and Measurements.

Emily Martin Signed by Emily Martin on
behalf of Kurt Valentine

By
Kurt Valentine
MWD

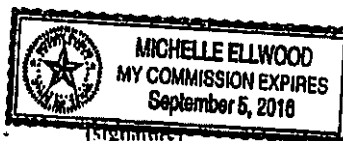
Subscribed and Sworn to before me this 16th day of December (month) 2015 (yr)

My Commission expires:

September 5, 2016

Michelle Ellwood
Notary Public

Midland, TX
(County State)





Misty 35 Federal Com 3H MWD+DMAG 0ft-13306ft Survey Geodetic Report

(Del Survey)

Report Date: November 23, 2015 - 09:25 PM
 Client: OXY
 Field: NM Eddy County (NAD 27)
 Structure / Siet: Oxy Misty 35 Federal 3H / Oxy Misty 35 Federal 3H
 Well: Misty 35 Com Federal 3H
 Borehole: Original Borehole
 UWI / API#: Unknown / Unknown
 Survey Name: Oxy Misty 35 Federal 3H MWD+DMAG 0ft-13306ft
 Survey Date: October 30, 2015
 Tori / AHD / DDH / ERD Ratio: 278.883' / 5175.023' / 6.345' / 0.566
 Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 41' 52.88377", W 103° 58' 2.24358"
 Location Grid N/E Y/X: N 817893 300 NUS, E 622858 000 NUS
 CRS Grid Convergence Angle: 0.2158°
 Grid Scale Factor: 0.9992638
 Version / Patch: 2 8 572.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 269.814° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB
 TVD Reference Elevation: 3534.000 ft above MSL
 Seabed / Ground Elevation: 3518.500 ft above MSL
 Magnetic Declination: 7.665°
 Total Gravity Field Strength: 988.5101 mgn (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48500.746 nT
 Magnetic Dip Angle: 60.834°
 Declination Date: October 30, 2015
 Magnetic Declination Model: HDGM 2015
 North Reference: Grid North
 Grid Convergence Used: 0.2158°
 Total Corr Mag North-Grid North: 7.4494°
 Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Top-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	817893.30	622858.00	N 32° 41' 52.88" W 103° 58' 2.24"	
Ground Level	17.50	0.00	0.00	17.50	0.00	0.00	0.00	0.00	817893.30	622858.00	N 32° 41' 52.88" W 103° 58' 2.24"	
	487.00	0.28	125.85	487.00	-0.82	-0.60	0.83	0.08	817892.70	622858.83	N 32° 41' 52.88" W 103° 58' 2.23"	
	618.00	0.09	343.74	618.00	-1.07	-0.68	1.07	0.22	817892.62	622859.07	N 32° 41' 52.98" W 103° 58' 2.23"	
	801.00	0.28	3.09	801.00	-1.05	-0.13	1.05	0.10	817893.17	622859.05	N 32° 41' 52.98" W 103° 58' 2.23"	
	987.00	0.35	6.66	986.99	-1.14	0.25	1.14	0.05	817894.15	622859.14	N 32° 41' 52.98" W 103° 58' 2.23"	
	1176.00	0.35	22.97	1175.99	-1.44	1.96	1.43	0.05	817895.28	622859.43	N 32° 41' 53.00" W 103° 58' 2.23"	
	1238.00	0.53	14.67	1237.99	-1.59	2.41	1.58	0.31	817895.71	622859.58	N 32° 41' 53.01" W 103° 58' 2.22"	
	1427.00	0.44	18.53	1426.98	-2.05	3.94	2.03	0.05	817897.24	622860.03	N 32° 41' 53.02" W 103° 58' 2.22"	
	1563.00	0.44	27.10	1552.98	-2.42	4.83	2.41	0.05	817898.13	622860.41	N 32° 41' 53.03" W 103° 58' 2.22"	
	1677.00	0.82	38.84	1676.97	-3.06	5.78	3.04	0.17	817899.08	622861.04	N 32° 41' 53.04" W 103° 58' 2.21"	
	1809.00	0.79	47.13	1808.98	-4.18	6.96	4.18	0.15	817900.26	622862.16	N 32° 41' 53.05" W 103° 58' 2.19"	
	1987.00	1.14	36.83	1986.94	-6.15	9.21	6.12	0.22	817902.51	622864.12	N 32° 41' 53.07" W 103° 58' 2.17"	
	2118.00	1.32	18.39	2117.91	-7.42	11.68	7.38	0.33	817904.98	622865.58	N 32° 41' 53.10" W 103° 58' 2.16"	
	2242.00	1.58	10.37	2241.87	-8.18	14.72	8.14	0.27	817908.02	622866.13	N 32° 41' 53.12" W 103° 58' 2.15"	
	2376.00	2.11	16.11	2375.80	-9.21	18.91	9.15	0.42	817912.21	622867.15	N 32° 41' 53.17" W 103° 58' 2.14"	
	2440.00	2.29	16.84	2439.75	-9.92	21.26	9.85	0.29	817914.58	622867.65	N 32° 41' 53.19" W 103° 58' 2.13"	
	2561.00	2.99	15.73	2560.82	-11.50	26.81	11.41	0.58	817919.81	622869.41	N 32° 41' 53.25" W 103° 58' 2.11"	
	2686.00	3.78	14.87	2685.40	-13.42	33.74	13.31	0.64	817927.04	622871.31	N 32° 41' 53.32" W 103° 58' 2.09"	
	2750.00	3.52	13.11	2748.27	-14.40	37.70	14.28	0.42	817931.00	622872.28	N 32° 41' 53.36" W 103° 58' 2.07"	
	2809.00	1.32	8.67	2808.22	-14.82	40.14	14.79	3.74	817933.43	622872.79	N 32° 41' 53.38" W 103° 58' 2.07"	
	2873.00	0.97	0.36	2872.20	-15.04	41.41	14.81	0.60	817934.70	622872.90	N 32° 41' 53.39" W 103° 58' 2.07"	
	2939.00	1.06	348.91	2938.19	-14.93	42.57	14.79	0.34	817935.86	622872.79	N 32° 41' 53.40" W 103° 58' 2.07"	
	3000.00	0.97	343.56	2999.18	-14.68	43.61	14.54	0.21	817936.91	622872.64	N 32° 41' 53.41" W 103° 58' 2.07"	
	3081.00	1.08	332.08	3080.17	-14.27	44.61	14.13	0.36	817937.91	622872.13	N 32° 41' 53.42" W 103° 58' 2.08	
	3127.00	0.97	301.27	3126.16	-13.72	45.64	13.57	0.14	817938.93	622871.57	N 32° 41' 53.43" W 103° 58' 2.08	
	3189.00	0.97	329.88	3188.16	-13.21	46.55	13.06	0.04	817939.85	622871.06	N 32° 41' 53.44" W 103° 58' 2.09	
	3249.00	0.97	331.00	3248.15	-12.71	47.44	12.56	0.03	817940.73	622870.55	N 32° 41' 53.45" W 103° 58' 2.09	
	3316.00	0.97	329.24	3315.14	-12.15	48.42	11.99	0.04	817941.72	622869.99	N 32° 41' 53.46" W 103° 58' 2.10	
	3378.00	1.14	334.59	3377.13	-11.62	49.43	11.46	0.32	817942.72	622869.40	N 32° 41' 53.47" W 103° 58' 2.11	
	3438.00	1.14	332.64	3437.12	-11.09	50.50	10.93	0.05	817943.79	622868.83	N 32° 41' 53.48" W 103° 58' 2.11	
	3504.00	1.23	333.76	3503.19	-10.49	51.72	10.32	0.14	817945.01	622868.32	N 32° 41' 53.50" W 103° 58' 2.12	
	3569.00	1.32	329.67	3568.08	-9.80	52.99	9.63	0.20	817946.29	622867.83	N 32° 41' 53.51" W 103° 58' 2.13	
	3631.00	1.32	328.83	3630.97	-9.09	54.22	9.01	0.01	817947.52	622866.91	N 32° 41' 53.52" W 103° 58' 2.14	
	3671.00	1.32	331.27	3670.66	-8.64	55.03	8.46	0.08	817948.32	622866.46	N 32° 41' 53.53" W 103° 58' 2.14	
	3695.00	0.08	226.42	3694.05	-7.83	56.31	7.65	1.00	817949.81	622865.05	N 32° 41' 53.54" W 103° 58' 2.15	
	3868.00	0.14	356.78	3867.05	-7.80	58.38	7.61	0.32	817949.66	622865.81	N 32° 41' 53.54" W 103° 58' 2.15	
	3930.00	1.47	126.88	3929.04	-6.43	55.96	8.24	2.52	817949.26	622866.24	N 32° 41' 53.54" W 103° 58' 2.14	
	4056.00	5.45	122.87	4054.78	-14.73	51.74	14.57	3.16	817945.04	622872.58	N 32° 41' 53.50" W 103° 58' 2.07	
	4119.00	7.00	120.82	4117.41	-20.54	48.16	20.38	2.49	817941.48	622878.38	N 32° 41' 53.48" W 103° 58' 2.00	
	4182.00	8.77	121.86	4176.81	-27.90	43.66	27.76	2.82	817936.96	622865.78	N 32° 41' 53.41" W 103° 58' 1.92	
	4244.00	11.36	122.85	4240.85	-37.03	37.86	36.81	4.18	817931.18	622874.91	N 32° 41' 53.36" W 103° 58' 1.81	
	4307.00	11.94	122.42	4302.56	-47.74	31.02	47.64	0.92	817824.32	622905.60	N 32° 41' 53.29" W 103° 58' 1.68	
	4370.00	10.65	122.84	4364.33	-58.10	24.36	58.03	2.05	817817.66	622918.02	N 32° 41' 53.22" W 103° 58' 1.56	
	4432.00	8.64	119.73	4425.48	-68.84	18.94	68.88	3.35	817812.24	622924.87	N 32° 41' 53.17" W 103° 58' 1.46	
	4495.00	5.47	116.76	4487.97	-73.72	15.24	73.67	5.06	817808.54	622931.66	N 32° 41' 53.11" W 103° 58' 1.38	
	4558.00	1.95	124.71	4550.83	-77.28	13.27	77.23	5.63	817808.57	622935.23	N 32° 41' 53.11" W 103° 58' 1.34	
	4621.00	0.32	178.49	4613.62	-78.16	12.49	78.12	2.82	817805.78	622936.11	N 32° 41' 53.10" W 103° 58' 1.33	
	4746.00	0.08	313.50	4738.81	-78.10	12.20	78.07	0.30	817805.50	622936.06	N 32° 41' 53.10" W 103° 58' 1.33	
	4809.00	0.17	338.76	4801.81	-78.04	12.32	78.00	0.16	817805.62	622935.99	N 32° 41' 53.10" W 103° 58' 1.33	
	4868.00	0.08	294.02	4860.81	-77.97	12.41	77.87	0.21	817805.79	622935.86	N 32° 41' 53.10" W 103° 58' 1.33	
	4935.00	0.10	340.58	4927.81	-77.81	12.49	77.87	0.11	817805.79	622935.86	N 32° 41' 53.10" W 103° 58' 1.33	
	5001.00	0.17	254.07	5003.81	-77.69	12.54	77.65	0.15	817805.84	622935.85	N 32° 41' 53.10" W 103° 58' 1.33	
	5123.00	0.03	283.49	5115.81	-77.58	12.52	77.55	0.23	817805.82	622935.54	N 32° 41' 53.10" W 103° 58' 1.34	
	5310.00	0.00	7.51	5302.81	-77.54	12.63	77.50	0.02	817805.83	622935.48	N 32° 41' 53.10" W 103° 58' 1.34	
	5436.00	0.07	150.82	5428.81	-77.58	12.48	77.54	0.06	817805.78	622935.63	N 32° 41' 53.10" W 103° 58' 1.34	
	5561.00	0.03	314.79	5553.81	-77.59	12.42	77.55	0.08	817805.72	622935.65	N 32° 41' 53.10" W 103° 58' 1.34	
	5624.00	0.15	318.25	5616.81	-77.52	12.49	77.48	0.18	817805.79	622935.48	N 32° 41' 53.10" W 103° 58' 1.34	
	5749.00	0.11	272.36	5741.81	-77.29	12.81	77.25	0.08	817805.91	622935.24	N 32° 41' 53.11" W 103° 58' 1.34	
	5811.00	0.08	247.33	5803.81	-77.19	12.60	77.15	0.08	817805.90	622935.14	N 32° 41' 53.11" W 103° 58' 1.34	
	5937.00	0.10	265.82	5929.81	-77.00	12.56	76.96	0.03	817805.85	622934.95	N 32° 41' 53.11" W 103° 58' 1.34	
	6063.00	0.03	278.28	6055.81	-76.86	12.56	76.82	0.06	817805.85	622934.81	N 32° 41' 53.11" W 103° 58' 1.34	
	6123.00	0.24	201.24	6115.81	-76.80	12.44	76.78	0.39	817805.74	622934.75	N 32° 41' 53.10" W 103° 58' 1.34	
	6188.00	0.26	216.48	6180.81	-76.66	12.20	76.62	0.11	817805.49	622934.81	N 32° 41' 53.10" W 103° 58' 1.35	
	6252.00	0.14	219.82	6244.81	-76.52	12.02	76.48	0.19	817805.32	622934.48	N 32° 41' 53.10" W 103° 58' 1.35	
	6315.00	0.35	229.69	6307.81	-76.32	11.83	76.29	0.34	817805.13	622934.28	N 32° 41' 53.10" W 103° 58' 1.35	
	6378.00	0.15	50.41	6370.81	-76.24	11.76	76.20	0.79	817805.06	622934.20	N 32° 41' 53.10" W 103° 58' 1.35	
	6441.00	0.19	351.36	6433.81	-76.29	11.92	76.25	0.27	817805.22	622934.25	N 32° 41' 53.10" W 103° 58' 1.35	
	6503.00	0.05	251.72	6495.81	-76.25	12.01	76.21	0.33	817805.31	622934.20	N 32° 41' 53.10" W 103° 58' 1.35	
	6566.00	0.47	255.71	6558.81	-76.07	11.94	75.03	0.87	817805.24	622933.00	N 32° 41' 53.10" W 103° 58' 1.35	
	6628.00	0.57	267.83	6621.81	-75.41	11.86	75.37	0.24	817805.16	622932.34	N 32° 41' 53.10" W 103° 58' 1.36	
	6691.00	0.81	255.76	6683.80	-74.78	11.77	74.74	0.21	817805.07	622932.74	N 32° 41' 53.10" W 103° 58' 5	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	6754.00	0.92	243.91	6746.80	-74.00	11.47	73.86	0.55	617904.77	622931.86	N 32 41 53.09 W 103 56 1.38	
	6817.00	0.83	234.73	6809.79	-73.17	10.88	73.14	0.26	617904.28	622931.13	N 32 41 53.09 W 103 56 1.39	
	6860.00	0.74	210.66	6872.79	-72.59	10.37	72.58	0.54	617903.67	622930.55	N 32 41 53.08 W 103 56 1.39	
	6943.00	0.59	206.74	6935.78	-72.23	9.73	72.20	0.25	617903.03	622930.20	N 32 41 53.08 W 103 56 1.40	
	7005.00	0.39	204.20	6997.78	-72.00	9.25	71.97	0.32	617902.55	622929.97	N 32 41 53.07 W 103 56 1.40	
	7068.00	0.57	170.18	7060.78	-71.87	8.75	71.84	0.52	617902.05	622929.93	N 32 41 53.07 W 103 56 1.40	
	7131.00	0.63	185.93	7123.77	-72.10	8.10	72.08	0.12	617801.40	622930.07	N 32 41 53.06 W 103 56 1.40	
	7184.00	0.67	135.15	7186.77	-72.44	7.50	72.42	0.56	617800.80	622930.41	N 32 41 53.06 W 103 56 1.40	
	7258.00	0.52	89.55	7248.77	-72.98	7.25	72.96	0.78	617800.55	622930.95	N 32 41 53.05 W 103 56 1.39	
	7319.00	0.42	113.40	7311.76	-73.48	7.16	73.45	0.35	617900.40	622931.45	N 32 41 53.05 W 103 56 1.38	
	7381.00	0.83	99.91	7373.76	-74.18	6.98	74.16	0.86	617900.28	622932.15	N 32 41 53.05 W 103 56 1.38	
	7444.00	2.30	106.87	7436.75	-75.89	6.53	75.87	2.18	617899.83	622933.87	N 32 41 53.05 W 103 56 1.38	
	7506.00	2.45	84.02	7498.68	-78.41	6.08	78.39	0.88	617899.38	622936.38	N 32 41 53.04 W 103 56 1.33	
	7569.00	2.14	83.55	7561.63	-80.92	6.12	80.90	0.83	617899.42	622938.89	N 32 41 53.04 W 103 56 1.30	
	7635.00	1.88	75.90	7627.58	-83.24	6.53	83.22	0.50	617899.83	622941.21	N 32 41 53.05 W 103 56 1.27	
	7698.00	0.89	227.94	7690.58	-84.00	6.54	83.98	4.11	617899.84	622941.98	N 32 41 53.05 W 103 56 1.28	
	7761.00	2.08	125.68	7753.56	-84.65	5.82	84.63	3.69	617899.92	622942.62	N 32 41 53.04 W 103 56 1.25	
	7823.00	3.08	214.77	7815.52	-84.60	3.60	84.59	5.85	617899.90	622942.58	N 32 41 53.02 W 103 56 1.25	
	7885.00	6.17	270.13	7877.34	-80.32	2.23	80.31	8.21	617895.53	622950.30	N 32 41 53.00 W 103 56 1.30	
	7948.00	14.64	271.99	7939.22	-69.85	2.62	69.84	13.77	617895.82	622958.43	N 32 41 53.01 W 103 56 1.44	
	8010.00	23.09	268.08	7997.81	-48.74	1.97	48.74	13.65	617895.27	622966.70	N 32 41 53.00 W 103 56 1.87	
	8073.00	19.79	252.87	8058.48	-26.19	-2.02	26.20	9.25	617891.28	622884.20	N 32 41 52.98 W 103 56 1.94	
	8136.00	22.78	262.84	8115.17	-4.32	-8.76	4.35	4.75	617884.54	622862.35	N 32 41 52.90 W 103 56 2.19	
	8199.00	28.08	268.90	8172.10	22.19	-12.17	-22.15	12.70	617880.13	622835.85	N 32 41 52.85 W 103 56 2.50	
	8261.00	35.15	270.78	8224.87	54.68	-13.72	-54.61	11.86	617879.58	622803.39	N 32 41 52.85 W 103 56 2.88	
	8324.00	40.54	274.70	8274.81	93.22	-11.79	-93.19	9.38	617881.51	622784.82	N 32 41 52.87 W 103 56 3.33	
	8387.00	36.81	268.88	8323.88	132.42	-11.14	-132.39	9.95	617882.16	622752.82	N 32 41 52.88 W 103 56 3.79	
	8449.00	40.17	258.60	8372.50	170.54	-18.11	-170.49	10.06	617877.19	622687.53	N 32 41 52.83 W 103 56 4.24	
	8512.00	41.20	251.51	8420.30	210.19	-28.72	-210.11	7.51	617868.58	622647.91	N 32 41 52.73 W 103 56 4.70	
	8575.00	43.90	258.99	8461.58	248.80	-36.28	-248.69	10.23	617857.02	622611.33	N 32 41 52.63 W 103 56 5.13	
	8638.00	46.55	263.24	8494.12	269.25	-39.77	-269.19	12.54	617853.53	622588.90	N 32 41 52.60 W 103 56 5.39	
	8691.00	48.48	263.53	8505.45	281.60	-42.38	-281.46	0.73	617850.94	622566.58	N 32 41 52.58 W 103 56 5.86	
	8754.00	45.77	263.69	8528.94	313.81	-44.65	-313.67	2.32	617848.45	622544.35	N 32 41 52.58 W 103 56 5.92	
	8817.00	44.78	263.87	8549.48	336.42	-47.35	-336.27	3.11	617845.95	622521.78	N 32 41 52.53 W 103 56 6.10	
	8880.00	50.25	268.98	8591.32	381.97	-51.03	-381.81	0.68	617842.28	622476.22	N 32 41 52.49 W 103 56 6.71	
	8943.00	58.11	269.33	8611.62	409.17	-51.89	-409.00	18.12	617841.42	622449.03	N 32 41 52.49 W 103 56 7.00	
	8999.00	61.43	271.53	8628.72	433.95	-51.89	-433.79	19.45	617841.82	622424.25	N 32 41 52.49 W 103 56 7.32	
	9062.00	68.53	273.11	8649.67	483.81	-50.46	-483.65	21.95	617842.84	622394.39	N 32 41 52.50 W 103 56 7.67	
	9125.00	73.98	271.98	8650.31	492.17	-49.21	-492.02	18.52	617844.10	622368.02	N 32 41 52.52 W 103 56 8.00	
	9188.00	81.30	273.51	8658.94	522.39	-47.75	-522.24	24.09	617845.55	622336.90	N 32 41 52.53 W 103 56 8.38	
	9251.00	88.38	276.28	8668.50	554.13	-45.03	-553.99	26.68	617848.28	622304.05	N 32 41 52.58 W 103 56 8.73	
	9314.00	92.99	277.87	8687.44	624.53	-38.41	-624.41	6.78	617858.90	622233.84	N 32 41 52.65 W 103 56 9.55	
	9377.00	92.41	277.51	8693.93	688.95	-28.10	-688.78	2.50	617885.21	622171.29	N 32 41 52.73 W 103 56 10.28	
	9440.00	91.17	277.85	8691.98	749.22	-19.88	-749.16	2.04	617873.82	622108.89	N 32 41 52.82 W 103 56 11.01	
	9503.00	90.38	278.41	8691.11	811.55	-10.77	-811.52	1.54	617882.53	622046.54	N 32 41 52.91 W 103 56 11.74	
	9566.00	90.48	277.78	8690.94	873.99	-1.90	-873.89	1.01	617891.40	621984.17	N 32 41 53.00 W 103 56 12.47	
	9629.00	90.24	277.58	8690.25	935.31	6.39	-935.33	0.50	617899.69	621922.74	N 32 41 53.08 W 103 56 13.19	
	9692.00	89.97	277.10	8690.13	996.77	14.31	-996.83	0.91	617907.61	621861.25	N 32 41 53.18 W 103 56 13.91	
	9755.00	88.46	278.39	8691.84	1121.55	31.29	-1121.66	1.58	617924.68	621796.43	N 32 41 53.33 W 103 56 15.37	
	9818.00	88.45	277.18	8692.49	1182.03	38.89	-1182.08	1.98	617932.89	621765.02	N 32 41 53.42 W 103 56 16.09	
	9881.00	87.90	275.87	8698.50	1245.46	46.90	-1245.82	2.10	617940.20	621812.48	N 32 41 53.49 W 103 56 16.82	
	9944.00	87.38	275.82	8698.05	1307.07	53.18	-1307.25	1.01	617948.45	621850.85	N 32 41 53.56 W 103 56 17.54	
	10007.00	87.93	274.10	8698.88	1369.77	58.49	-1369.98	2.51	617951.79	621888.14	N 32 41 53.81 W 103 56 18.27	
	10070.00	89.35	273.34	8692.23	1432.60	62.58	-1432.81	2.69	617955.87	621825.30	N 32 41 53.88 W 103 56 19.01	
	10133.00	90.78	272.43	8692.15	1495.51	65.75	-1495.73	2.71	617959.04	621762.39	N 32 41 53.89 W 103 56 19.74	
	10196.00	91.89	270.81	8690.68	1558.45	67.53	-1558.68	3.11	617960.82	621699.44	N 32 41 53.71 W 103 56 20.48	
	10259.00	93.10	268.63	8687.98	1620.39	67.23	-1620.62	4.02	617960.52	621637.50	N 32 41 53.71 W 103 56 21.20	
	10322.00	93.51	267.38	8684.35	1683.25	68.04	-1683.47	2.07	617958.23	621574.65	N 32 41 53.68 W 103 56 21.94	
	10385.00	93.41	267.09	8680.55	1746.06	62.07	-1746.28	0.50	617955.31	621511.85	N 32 41 53.68 W 103 56 22.67	
	10448.00	92.82	265.42	8677.12	1808.86	57.91	-1809.06	2.81	617951.20	621449.08	N 32 41 53.82 W 103 56 23.41	
	10511.00	92.31	264.96	8674.30	1871.59	52.63	-1871.77	1.10	617945.92	621386.37	N 32 41 53.57 W 103 56 24.14	
	10574.00	91.65	264.99	8672.13	1934.33	47.11	-1934.49	1.04	617940.41	621323.68	N 32 41 53.62 W 103 56 24.88	
	10637.00	90.48	264.31	8670.98	1996.06	41.33	-1996.21	2.18	617934.83	621260.94	N 32 41 53.47 W 103 56 25.60	
	10700.00	89.00	264.05	8671.28	2058.76	34.94	-2058.98	2.38	617928.24	621199.27	N 32 41 53.41 W 103 56 26.33	
	10763.00	87.66	264.92	8673.09	2121.48	28.69	-2121.58	2.54	617922.19	621137.60	N 32 41 53.25 W 103 56 27.07	
	10826.00	86.83	266.01	8674.07	2183.23	24.32	-2183.32	3.04	617917.62	621074.85	N 32 41 53.31 W 103 56 27.79	
	10889.00	86.08	268.64	8674.97	2246.06	21.63	-2246.14	3.72	617915.13	621012.03	N 32 41 53.28 W 103 56 28.53	
	10952.00	86.39	270.23	8674.04	2307.92	21.33	-2308.01	8.21	617914.63	620950.17	N 32 41 53.28 W 103 56 29.25	
	11015.00	87.35	272.79	8675.48	2370.80	22.99	-2370.88	4.32	617918.28	620887.29	N 32 41 53.30 W 103 56 29.99	
	11078.00	87.84	272.69	8676.03	2433.66	25.64	-2433.78	0.98	617919.24	620824.52	N 32 41 53.33 W 103 56 30.71	
	11141.00	87.73	271.81	8676.41	2496.57	28.30	-2496.67	1.74	617921.60	620761.52	N 32 41 53.38 W 103 56 31.45	
	11204.00	87.50	271.24	8676.99	2558.49	29.88	-2558.60	0.63	617923.18	620699.59	N 32 41 53.37 W 103 56 32.18	
	11267.00	87.58	270.85	8677.61	2620.42	30.99	-2620.53	0.63	617924.29	620637.67	N 32 41 53.39 W 103 56 32.91	
	11330.00	87.70	270.24	8678.22	2683.36	31.59	-2683.48	0.98	617924.89	620574.73	N 32 41 53.40 W 103 56 33.64	
	11393.00	87.89	270.26	8678.71	2745.31	31.86	-2745.43	0.03	617925.18	620512.78	N 32 41 53.40 W 103 56 34.37	
	11456.00	87.80	269.77	8679.19	2808.26	31.88	-2808.38	0.81	617925.18	620450.84	N 32 41 53.40 W 103 56 35.10	
	11519.00	87.83	269.57	8679.70	2871.21	31.52	-2871.32	0.42	617924.81	620388.89	N 32 41 53.40 W 103 56 35.84	
	11582.00	87.63	270.03	8680.10	2934.16	31.31	-2934.27					

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	12893.00	85.45	270.35	8667.43	4488.32	65.93	-4488.55	6.39	617958.32	616369.78	N 32 41 53.79	W 103 56 54.78
	12958.00	87.45	269.47	8671.34	4551.19	64.93	-4551.43	3.47	617958.22	616306.92	N 32 41 53.79	W 103 56 55.50
	13019.00	91.54	268.24	8671.89	4614.16	63.67	-4614.40	8.79	617958.96	616243.95	N 32 41 53.78	W 103 56 56.24
	13080.00	92.99	267.65	8669.48	4675.06	61.48	-4675.31	2.56	617954.77	616183.06	N 32 41 53.78	W 103 56 56.95
	13143.00	92.88	267.14	8666.37	4737.95	58.62	-4738.16	0.94	617951.92	616120.19	N 32 41 53.74	W 103 56 57.68
	13206.00	92.23	267.42	8663.67	4800.83	55.63	-4801.04	0.83	617948.93	616057.33	N 32 41 53.71	W 103 56 58.42
Last Survey	13237.00	92.33	267.58	8662.43	4831.78	64.28	-4831.98	0.68	617947.58	616026.38	N 32 41 53.70	W 103 56 58.78
Proj to BA	13306.00	92.33	267.58	8659.63	4900.67	51.39	-4900.88	0.01	617944.68	617957.51	N 32 41 53.67	W 103 56 59.59

Survey Type: Del Survey

Survey Error Model: ISCWSA Rev D *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	17.500	Act Stns	30.000	30.000	SLB_MWD-STD_HDGM Depth Only	Original Borehole / Oxy Misty 35 Federal 3H MWD+DMAQ 0ft-13306ft
	1	17.500	467.000	1/88 425	30.000	30.000	SLB_MWD-STD_HDGM	Original Borehole / Oxy Misty 35 Federal 3H MWD+DMAQ 0ft-
	1	467.000	12271.000	Act Stns	30.000	30.000	SLB_MWD-STD_HDGM	Original Borehole / Oxy Misty 35 Federal 3H MWD+DMAQ 0ft-
	1	12271.000	13306.000	Act Stns	30.000	30.000	SLB_MWD+DMAQ	Original Borehole / Oxy Misty 35 Federal 3H MWD+DMAQ 0ft-



Caution 45

Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cemented		Cement	
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