

Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

30-015-44636

~~NM OIL CONSERVATION~~
ARTESIA DISTRICT

May 2, 2018

SEP 04 2018

OXY USA INC.
5 Greenway Plaza, Suite 110
Houston, TX 77046

RECEIVED

Re:

I, 25S, 29E, Eddy NM
32.16399 -103.93338

CLIENT: OXY USA INC.
WELL: Corral Canyon 36-25 Federal Com 26H
FIELD: Pierce Crossing Bone Spring, East

RIG: H&P 636
COUNTY: Eddy
API NO: 30-015-44636
JOB NO: 18MLD2326

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation (P-5 No. 754900).
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>
Perry Hawks FE	Corral Canyon 36-25 Federal Com 26H Original Hole	770.00 Ft to 19615.00 Ft	March 24, 2018 to April 10, 2018	TelePacer SlimPulse

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

Cody Nelms
Field Service Manager

Schlumberger Drilling and Measurements
Drilling Group
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Midland, Texas 79706
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SEP 04 2018

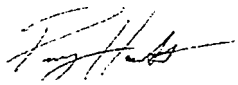
RECEIVED

Well Reference:

1, 25S, 29E, Eddy NM
32.16399 -103.93338

I, Perry Hawks certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of March 24, 2018 through April 10, 2018, conduct or supervise the taking of the TelePacer & SlimPulse surveys from a depth of 770.00 feet to a depth of 19615.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of OXY USA INC. for the Corral Canyon 36-25 Federal Com 26H Well (Original Hole) API No. 30-015-44636 in New Mexico; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

By
Perry Hawks
FE



Subscribed and Sworn to before me this 2nd day of May (month) 2018 (yr)

My Commission expires:

2-11-2022

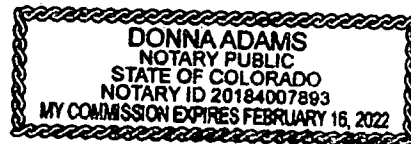
Notary Public

D. Adams

(signature)

(County State)

Adams County Colorado



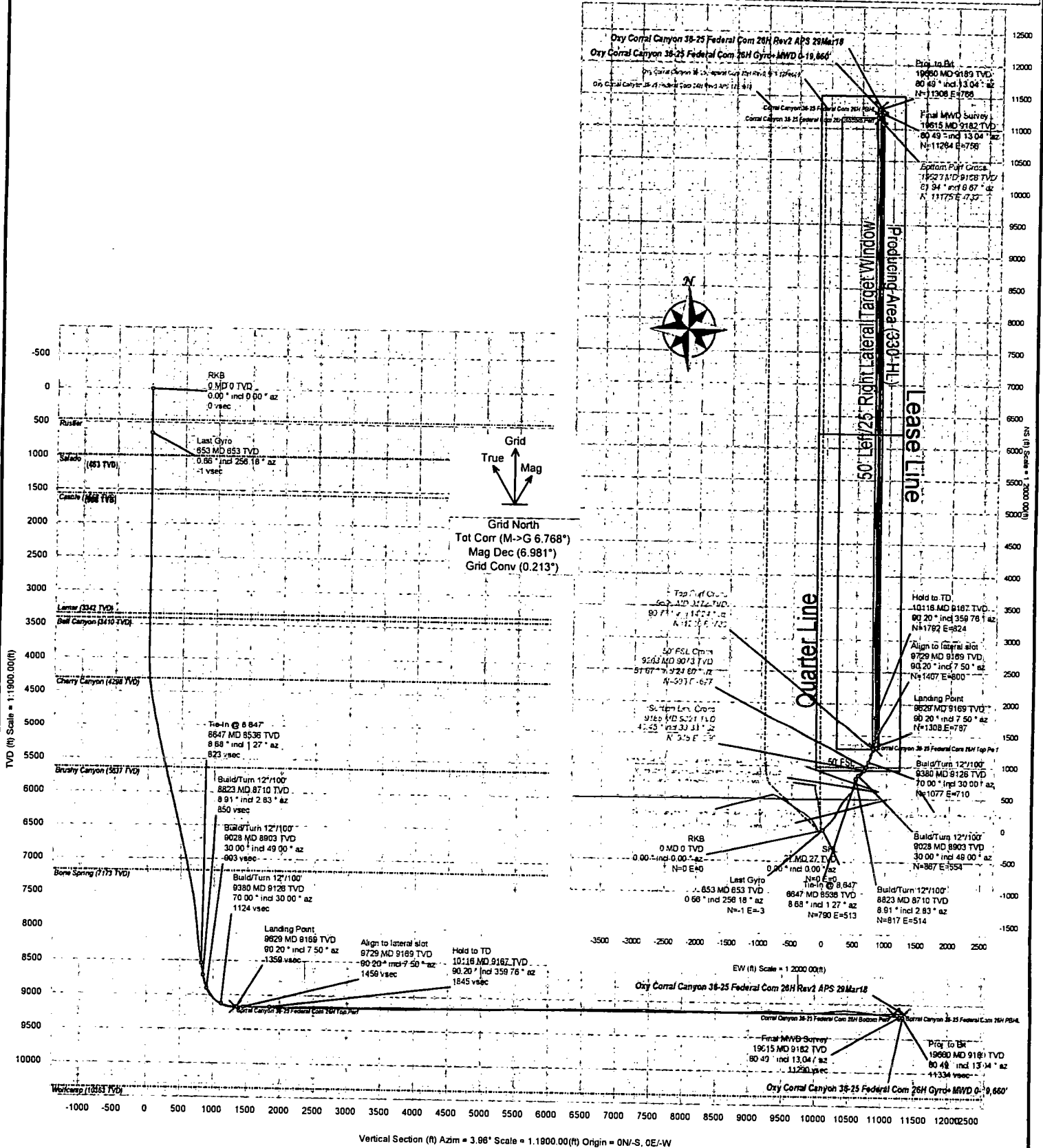
Schlumberger

OXY



Borehole: Original Borehole Well: Oxy Corral Canyon 36-25 Federal Com 26H Field: NM Eddy County (NAD 83) Structure: Oxy Corral Canyon 36-25 Federal Com 26H

Gravity & Magnetic Parameters			Surface Location			Miscellaneous		
Model:	HGM 2018	Dip: 59.834°	Date:	19-Mar-2018	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Slot:	Oxy Corral Canyon 36-25 Federal Com 26H	Plan: Oxy Corral Canyon 36-25 Federal Com 26H Rev2 APS 29Mar18
MagDec:	6.981°	P.S. 48011.18nT	Gravity F8:	979.449mgn (1.82643 Based)	Lat: N 32 9 50.36	Grid Conv:	0.2129°	
					Lon: W 103 36 0.15	Easting:	645099.061US	
						Scale Fact:	0.99992643	



Oxy Corral Canyon 36-25 Federal Com 26H Gyro+MWD 0-19,660' Survey

Geodetic Report

(Def Survey)

Report Date: April 11, 2018 - 11:41 AM Client: OXY Field: NM Eddy County (NAD 83) Structure / Slot: Oxy Corral Canyon 36-25 Federal Com 26H / Oxy Corral Canyon 36-25 Federal Com 26H Well: Oxy Corral Canyon 36-25 Federal Com 26H Borehole: Original Borehole UWI / API#: Unknown / 30-015-44636 Survey Name: Oxy Corral Canyon 36-25 Federal Com 26H Gyro+MWD 0-19,660' Survey Date: March 19, 2018 Tort / AHD / DDI / ERD Ratio: 427.723' / 11613.550 ft / 7.026 / 1.264 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet Location Lat / Long: N 32° 9' 50.35603", W 103° 56' 0.15016" Location Grid N/E Y/X: N 423623.780 NUS, E 665099.060 RUS CRS Grid Convergence Angle: 0.2129° Grid Scale Factor: 0.99992663 Version / Patch: 2.10 715.0	Survey / DLS Computation: Minimum Curvature / Lubinski Vertical Section Azimuth: 3.961° (Grid North) Vertical Section Origin: 0.000 ft, 0.000 ft TVD Reference Datum: RKB=26.5' TVD Reference Elevation: 3162.500 ft above MSL Seabed / Ground Elevation: 3136.000 ft above MSL Magnetic Declination: 6.981° Total Gravity Field Strength: 998.4488mgm (9 80665 Based) Gravity Model: GARM Total Magnetic Field Strength: 48011.190 nT Magnetic Dip Angle: 59.924° Declination Date: March 19, 2018 Magnetic Declination Model: HDGM 2018 North Reference: Grid North Grid Convergence Used: 0.2129° Total Corr Mag North->Grid North: 6.7677° Local Coord Referenced To: Well Head
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Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
RKB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	423623.78	665099.06	N 32° 9' 50.36" W 103° 56' 0.15"	
SHL	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	423623.78	665099.06	N 32° 9' 50.36" W 103° 56' 0.15"	
	99.83	0.03	233.00	99.83	-0.01	-0.01	-0.02	0.04	423623.77	665099.04	N 32° 9' 50.36" W 103° 56' 0.15"	
	189.07	0.10	259.99	189.07	-0.05	-0.04	-0.11	0.08	423623.74	665098.95	N 32° 9' 50.36" W 103° 56' 0.15"	
	278.37	0.21	252.18	278.37	-0.13	-0.10	-0.34	0.13	423623.68	665098.72	N 32° 9' 50.36" W 103° 56' 0.15"	
	373.60	0.45	253.64	373.60	-0.32	-0.26	-0.87	0.25	423623.52	665098.19	N 32° 9' 50.35" W 103° 56' 0.16"	
	467.92	0.40	248.21	467.92	-0.59	-0.49	-1.53	0.07	423623.29	665097.53	N 32° 9' 50.35" W 103° 56' 0.17"	
	563.44	0.38	254.96	563.43	-0.84	-0.69	-2.14	0.05	423623.09	665096.92	N 32° 9' 50.35" W 103° 56' 0.18"	
	652.68	0.66	256.18	652.67	-1.09	-0.89	-2.93	0.31	423622.89	665096.13	N 32° 9' 50.35" W 103° 56' 0.18"	
	770.00	0.92	273.02	769.98	-1.32	-1.01	-4.53	0.29	423622.77	665094.53	N 32° 9' 50.35" W 103° 56' 0.20"	
	862.00	0.34	291.05	861.97	-1.25	-0.87	-5.52	0.66	423622.91	665093.54	N 32° 9' 50.35" W 103° 56' 0.21"	
	953.00	0.17	337.06	952.97	-1.05	-0.65	-5.82	0.28	423623.13	665093.24	N 32° 9' 50.35" W 103° 56' 0.22"	
	1042.00	0.16	294.06	1041.97	-0.89	-0.47	-5.99	0.14	423623.31	665093.07	N 32° 9' 50.35" W 103° 56' 0.22"	
	1221.00	0.00	119.54	1220.97	-0.80	-0.37	-6.22	0.09	423623.41	665092.84	N 32° 9' 50.35" W 103° 56' 0.22"	
	1310.00	0.13	277.09	1309.97	-0.80	-0.36	-6.32	0.15	423623.42	665092.84	N 32° 9' 50.35" W 103° 56' 0.22"	
	1500.00	0.20	302.13	1499.97	-0.63	-0.16	-6.81	0.05	423623.62	665092.25	N 32° 9' 50.35" W 103° 56' 0.23"	
	1595.00	0.13	202.72	1594.97	-0.65	-0.17	-6.99	0.27	423623.61	665092.07	N 32° 9' 50.35" W 103° 56' 0.23"	
	1690.00	0.20	262.11	1689.97	-0.79	-0.29	-7.20	0.18	423623.49	665091.86	N 32° 9' 50.35" W 103° 56' 0.23"	
	1785.00	0.22	119.07	1784.97	-0.90	-0.40	-7.20	0.42	423623.38	665091.86	N 32° 9' 50.35" W 103° 56' 0.23"	
	1880.00	0.40	134.15	1879.97	-1.19	-0.72	-6.81	0.21	423623.06	665092.25	N 32° 9' 50.35" W 103° 56' 0.23"	
	1975.00	0.50	130.26	1974.96	-1.65	-1.22	-6.25	0.11	423622.56	665092.81	N 32° 9' 50.35" W 103° 56' 0.23"	
	2070.00	0.23	152.98	2069.96	-2.06	-1.66	-5.85	0.32	423622.12	665093.21	N 32° 9' 50.34" W 103° 56' 0.22"	
	2164.00	0.11	47.76	2163.96	-2.16	-1.77	-5.70	0.30	423622.01	665093.36	N 32° 9' 50.34" W 103° 56' 0.22"	
	2355.00	0.32	61.79	2354.96	-1.74	-1.39	-5.09	0.11	423622.39	665093.97	N 32° 9' 50.34" W 103° 56' 0.21"	
	2545.00	0.23	24.58	2544.96	-1.10	-0.79	-4.47	0.10	423622.99	665094.60	N 32° 9' 50.35" W 103° 56' 0.20"	
	2734.00	0.28	147.27	2733.96	-1.11	-0.84	-4.06	0.24	423622.94	665095.00	N 32° 9' 50.35" W 103° 56' 0.20"	
	2924.00	0.20	139.49	2923.96	-1.72	-1.48	-3.59	0.05	423622.30	665095.47	N 32° 9' 50.34" W 103° 56' 0.19"	
	3019.00	0.30	175.16	3018.96	-2.09	-1.85	-3.46	0.19	423621.93	665095.60	N 32° 9' 50.34" W 103° 56' 0.19"	
	3209.00	0.34	206.66	3208.95	-3.10	-2.85	-3.67	0.09	423620.93	665095.39	N 32° 9' 50.33" W 103° 56' 0.19"	
	3304.00	0.33	255.18	3303.95	-3.45	-3.17	-4.06	0.29	423620.61	665095.00	N 32° 9' 50.32" W 103° 56' 0.20"	
	3494.00	0.11	343.16	3493.95	-3.45	-3.14	-4.65	0.18	423620.64	665095.00	N 32° 9' 50.32" W 103° 56' 0.20"	
	3683.00	0.13	97.64	3682.95	-3.30	-2.99	-4.49	0.11	423620.79	665094.57	N 32° 9' 50.33" W 103° 56' 0.20"	
	3778.00	0.08	87.03	3777.95	-3.30	-3.01	-4.31	0.06	423620.77	665094.75	N 32° 9' 50.33" W 103° 56' 0.20"	
	3873.00	0.17	7.47	3872.95	-3.15	-2.86	-4.23	0.18	423620.92	665094.83	N 32° 9' 50.33" W 103° 56' 0.20"	
	3968.00	0.23	329.71	3967.95	-2.85	-2.56	-4.31	0.15	423621.22	665094.75	N 32° 9' 50.33" W 103° 56' 0.20"	
	4158.00	4.10	46.84	4157.78	2.45	2.42	0.46	2.13	423628.05	665099.52	N 32° 9' 50.38" W 103° 56' 0.14"	
	4253.00	6.02	45.00	4252.41	8.69	8.27	6.46	2.03	423632.05	665105.52	N 32° 9' 50.44" W 103° 56' 0.07"	
	4348.00	7.39	44.04	4346.76	17.12	16.18	14.23	1.45	423639.96	665113.29	N 32° 9' 50.52" W 103° 55' 59.98"	
	4442.00	9.57	45.32	4439.72	27.62	26.02	23.99	2.33	423649.80	665132.05	N 32° 9' 50.61" W 103° 55' 59.87"	
	4537.00	11.73	44.78	4533.08	40.85	38.43	36.41	2.28	423662.21	665135.46	N 32° 9' 50.73" W 103° 55' 59.72"	
	4727.00	15.86	44.80	4717.56	75.13	70.58	68.32	2.17	423694.35	665167.37	N 32° 9' 51.05" W 103° 55' 59.35"	
	4822.00	13.87	43.90	4809.38	93.68	87.99	85.36	2.11	423711.77	665184.42	N 32° 9' 51.22" W 103° 55' 59.15"	
	4917.00	14.21	43.39	4901.54	111.42	104.67	101.27	0.38	423728.44	665200.32	N 32° 9' 51.39" W 103° 55' 58.97"	
	5012.00	13.72	41.72	4993.73	129.33	121.55	116.78	0.67	423745.32	665215.83	N 32° 9' 51.55" W 103° 55' 58.79"	
	5107.00	14.09	40.69	5085.95	147.51	138.73	131.81	0.47	423762.50	665230.86	N 32° 9' 51.72" W 103° 55' 58.61"	
	5202.00	14.26	38.24	5178.06	166.44	156.69	146.59	0.66	423780.46	665245.64	N 32° 9' 51.90" W 103° 55' 58.44"	
	5297.00	14.25	36.99	5270.13	185.91	175.22	160.87	0.32	423798.98	665259.92	N 32° 9' 52.08" W 103° 55' 58.27"	
	5487.00	14.83	33.33	5454.05	226.71	214.21	188.30	0.57	423837.98	665287.35	N 32° 9' 52.47" W 103° 55' 57.95"	
	5582.00	14.76	29.45	5545.90	248.23	234.91	200.93	1.05	423858.67	665299.98	N 32° 9' 52.67" W 103° 55' 57.80"	
	5772.00	14.52	28.01	5729.73	291.83	277.01	224.02	0.23	423900.77	665323.06	N 32° 9' 53.09" W 103° 55' 57.53"	
	5866.00	14.47	27.53	5820.74	313.35	297.83	234.98	0.14	423921.59	665334.02	N 32° 9' 53.29" W 103° 55' 57.40"	
	5961.00	14.28	26.36	5912.77	335.06	318.85	245.67	0.37	423942.61	665344.71	N 32° 9' 53.50" W 103° 55' 57.28"	
	6151.00	14.95	27.24	6096.82	379.24	361.64	267.29	0.37	423985.39	665366.33	N 32° 9' 53.92" W 103° 55' 57.03"	
	6341.00	14.90	31.71	6280.22	423.37	404.21	291.35	0.61	424027.96	665390.39	N 32° 9' 54.35" W 103° 55' 56.74"	
	6436.00	14.89	33.71	6372.02	444.78	424.76	304.54	0.54	424048.51	665403.58	N 32° 9' 54.55" W 103° 55' 56.59"	
	6626.00	14.92	37.29	6555.64	486.41	464.53	332.91	0.48	424088.27	665431.95	N 32° 9' 54.94" W 103° 55' 56.26"	
	6721.00	14.91	38.25	6647.43	506.73	483.85	347.89	0.26	424107.60	665446.92	N 32° 9' 55.13" W 103° 55' 56.08"	
	6911.00	14.91	39.73	6831.04	546.76	521.85	378.64	0.20	424145.59	665477.67	N 32° 9' 55.51" W 103° 55' 55.72"	
	7006.00	14.61	40.43	6922.90	566.31	540.37	394.22	0.37	424164.11	665493.26	N 32° 9' 55.69" W 103° 55' 55.54"	
	7101.00	14.68	39.42	7014.82	585.75	558.79	409.64	0.28	424182.52	665508.67	N 32° 9' 55.87" W 103° 55' 55.36"	
	7196.00	14.83	39.90	7106.68	605.40	577.41	425.08	0.20	424201.15	665524.11	N 32° 9' 56.05" W 103° 55' 55.18"	
	7291.00	14.72	40.01	7198.54	625.00	595.98	440.64	0.12	424219.72	665539.67	N 32° 9' 56.24" W 103° 55' 55.00"	
	7385.00	14.05	39.91	7289.60	643.89	613.88	455.64	0.71	424237.62	665554.66	N 32° 9' 56.41" W 103° 55' 54.82"	
	7480.00	13.12	37.41	7381.94	662.23	631.29	469.59	1.16	424255.03	665568.61	N 32° 9' 56.59" W 103° 55' 54.66"	
	7669.00	10.34	29.51	7566.98	695.44	663.10	490.98	1.70	424286.83	665590.00	N 32° 9' 56.90" W 103° 55' 54.41"	
	7764.00	9.68	25.90	7660.54	710.54	677.71	498.67	0.96	424301.44	665597.69	N 32° 9' 57.04" W 103° 55' 54.32"	
	7859.00	7.92	23.28	7754.42	724.12	690.90	504.74	1.90	424314.63	665603.77	N 32° 9' 57.17" W 103° 55' 54.25"	
	7954.00	7.11	18.93	7848.60	735.98	702.48	509.24	1.04	424326.21	665608.26	N 32° 9' 57.29" W 103° 55' 54.20"	
	8049.00	6.31	12.63	7942.95	746.82	713.13	512.29	1.14	424336.86	665611.31	N 32° 9' 57.39" W 103° 55' 54.16"	
	8144.00	5.82	4.08	8037.41	756.88	723.12	513.78	1.04	424346.84	665612.80	N 32° 9' 57.49" W 103° 55' 54.14"	
	8238.00	6.24	356.34	8130.88	766.79	733.05	513.80	0.94	424356.77	665612.82	N 32° 9' 57.59" W 103° 55' 54.14"	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (NUS)	Easting (EUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	8334.00	7.43	358.61	8226.20	778.14	744.46	513.31	1.27	424368.19	665612.33	N 32 9 57.70 W 103 55 54.15	
	8429.00	8.07	358.61	8320.33	790.90	757.27	513.00	0.67	424380.99	665612.02	N 32 9 57.83 W 103 55 54.15	
	8524.00	8.69	359.44	8414.32	804.69	771.11	512.77	0.66	424394.83	665611.79	N 32 9 57.97 W 103 55 54.15	
	8619.00	8.63	0.92	8508.24	818.96	785.41	512.81	0.24	424409.13	665611.84	N 32 9 58.11 W 103 55 54.15	
	8647.00	8.68	1.27	8535.92	823.17	789.63	512.89	0.26	424413.33	665611.92	N 32 9 58.15 W 103 55 54.15	
	8843.00	14.81	35.46	8727.94	859.38	824.89	527.79	4.61	424448.61	665626.81	N 32 9 58.50 W 103 55 53.97	
	8938.00	26.34	52.11	8816.80	883.90	847.82	551.56	13.50	424471.53	665650.58	N 32 9 58.73 W 103 55 53.70	
	9033.00	31.98	50.25	8899.73	915.37	876.87	587.57	6.01	424500.59	665686.58	N 32 9 59.01 W 103 55 53.28	
	9128.00	38.49	41.94	8977.32	956.12	915.01	626.73	8.50	424538.72	665725.74	N 32 9 59.39 W 103 55 52.82	
	9223.00	46.91	28.66	9047.22	1011.15	967.64	663.27	12.94	424591.35	665762.28	N 32 9 59.91 W 103 55 52.39	
	9317.00	58.73	20.35	9103.99	1081.20	1035.74	693.84	14.39	424659.45	665792.85	N 32 10 0.58 W 103 55 52.03	
	9412.00	70.19	23.41	9144.89	1162.58	1115.10	725.83	12.41	424738.80	665824.83	N 32 10 1.36 W 103 55 51.66	
	9507.00	82.69	19.71	9167.12	1250.44	1200.83	759.62	13.69	424824.52	665858.62	N 32 10 2.21 W 103 55 51.26	
	9602.00	91.31	13.87	9172.10	1342.82	1291.54	786.97	10.95	424915.22	665885.97	N 32 10 3.11 W 103 55 50.94	
	9627.00	91.96	13.15	9171.38	1367.46	1315.84	792.80	3.88	424939.52	665891.80	N 32 10 3.35 W 103 55 50.87	
	9740.00	92.00	9.17	9167.48	1479.48	1426.61	814.66	3.52	425050.28	665913.66	N 32 10 4.44 W 103 55 50.61	
	9834.00	88.83	3.82	9166.80	1573.34	1519.96	825.28	6.61	425143.62	665924.28	N 32 10 5.37 W 103 55 50.48	
	9927.00	89.04	358.25	9168.53	1666.17	1612.89	826.96	5.99	425236.55	665925.96	N 32 10 6.29 W 103 55 50.46	
	10020.00	87.07	359.61	9171.68	1758.75	1705.81	825.23	2.57	425329.47	665924.22	N 32 10 7.20 W 103 55 50.48	
	10114.00	89.38	3.70	9174.59	1852.60	1799.70	827.94	5.00	425423.35	665926.94	N 32 10 8.13 W 103 55 50.44	
	10207.00	89.86	1.48	9175.21	1945.56	1892.60	832.14	2.44	425516.24	665931.14	N 32 10 9.05 W 103 55 50.39	
	10300.00	89.59	1.80	9175.66	2038.49	1985.56	834.81	0.45	425609.19	665933.80	N 32 10 9.97 W 103 55 50.35	
	10394.00	89.62	355.94	9176.31	2132.07	2079.50	832.95	6.23	425703.12	665931.95	N 32 10 10.90 W 103 55 50.37	
	10487.00	90.48	357.77	9176.23	2224.35	2172.36	827.85	2.17	425795.97	665926.85	N 32 10 11.82 W 103 55 50.43	
	10580.00	89.45	355.93	9176.28	2316.63	2265.21	822.74	2.27	425888.82	665921.74	N 32 10 12.74 W 103 55 50.48	
	10674.00	90.38	355.65	9176.42	2409.68	2358.95	815.84	1.03	425982.56	665914.84	N 32 10 13.67 W 103 55 50.56	
	10767.00	88.90	356.33	9177.01	2501.77	2451.72	809.34	1.75	426075.32	665908.34	N 32 10 14.59 W 103 55 50.63	
	10860.00	90.82	1.16	9177.23	2594.36	2544.67	807.30	5.59	426168.26	665906.30	N 32 10 15.51 W 103 55 50.65	
	10955.00	90.41	0.55	9176.21	2689.21	2639.65	808.72	0.77	426263.23	665907.72	N 32 10 16.45 W 103 55 50.63	
	11050.00	91.10	357.31	9174.96	2783.82	2734.61	806.94	3.49	426358.19	665905.94	N 32 10 17.39 W 103 55 50.64	
	11145.00	90.14	358.23	9173.93	2878.26	2829.53	803.25	1.40	426453.10	665902.25	N 32 10 18.33 W 103 55 50.68	
	11240.00	90.03	357.20	9173.79	2972.70	2924.46	799.46	1.09	426548.02	665898.46	N 32 10 19.26 W 103 55 50.72	
	11335.00	90.17	1.22	9173.63	3067.35	3019.43	798.15	4.23	426642.98	665897.15	N 32 10 20.20 W 103 55 50.73	
	11430.00	90.86	358.07	9172.69	3162.06	3114.41	797.56	3.42	426737.93	665896.56	N 32 10 21.14 W 103 55 50.74	
	11525.00	89.55	0.68	9172.27	3256.75	3209.39	796.53	3.12	426832.93	665895.53	N 32 10 22.08 W 103 55 50.74	
	11619.00	89.41	3.66	9173.12	3350.69	3303.31	800.09	3.17	426926.84	665899.09	N 32 10 23.01 W 103 55 50.70	
	11714.00	89.86	3.80	9173.73	3445.68	3398.12	806.10	0.48	427021.64	665905.10	N 32 10 23.95 W 103 55 50.62	
	11809.00	87.94	3.25	9175.55	3540.66	3492.92	811.77	2.05	427116.44	665910.77	N 32 10 24.89 W 103 55 50.55	
	11904.00	89.86	4.33	9177.37	3635.63	3587.69	818.05	2.32	427211.20	665917.05	N 32 10 25.83 W 103 55 50.48	
	12000.00	88.49	2.63	9178.75	3731.62	3683.50	823.88	2.27	427307.00	665922.88	N 32 10 26.77 W 103 55 50.41	
	12094.00	89.76	3.44	9180.19	3825.59	3777.36	828.86	1.60	427400.85	665927.85	N 32 10 27.70 W 103 55 50.34	
	12190.00	93.47	358.70	9177.48	3921.39	3873.26	830.65	6.27	427496.74	665929.65	N 32 10 28.65 W 103 55 50.32	
	12285.00	91.96	356.36	9172.98	4015.67	3968.05	826.56	2.93	427591.53	665925.56	N 32 10 29.59 W 103 55 50.36	
	12380.00	91.89	356.02	9169.79	4109.75	4062.79	820.25	0.37	427686.26	665919.25	N 32 10 30.53 W 103 55 50.43	
	12475.00	90.93	355.79	9167.45	4203.78	4157.52	813.47	1.04	427780.98	665912.47	N 32 10 31.47 W 103 55 50.51	
	12570.00	91.75	359.07	9165.23	4298.12	4252.38	809.21	3.56	427875.84	665908.21	N 32 10 32.40 W 103 55 50.55	
	12664.00	90.45	359.96	9163.43	4391.82	4346.36	808.42	1.68	427969.81	665907.41	N 32 10 33.33 W 103 55 50.56	
	12759.00	90.03	0.11	9163.03	4486.60	4441.36	808.47	0.47	428064.80	665907.47	N 32 10 34.27 W 103 55 50.55	
	12854.00	90.55	1.01	9162.55	4581.43	4536.35	809.40	1.09	428159.79	665908.40	N 32 10 35.21 W 103 55 50.54	
	12950.00	89.90	357.82	9162.17	4677.11	4632.33	808.42	3.39	428255.76	665907.42	N 32 10 36.16 W 103 55 50.54	
	13045.00	89.93	353.31	9162.31	4771.07	4727.02	801.08	4.75	428350.44	665900.08	N 32 10 37.10 W 103 55 50.63	
	13140.00	89.97	353.65	9162.40	4864.48	4821.41	790.29	0.36	428444.82	665889.29	N 32 10 38.04 W 103 55 50.75	
	13235.00	89.69	358.23	9162.68	4958.53	4916.14	783.57	4.83	428539.55	665882.57	N 32 10 38.97 W 103 55 50.82	
	13330.00	88.46	1.77	9165.87	5053.22	5011.06	783.56	5.04	428634.46	665882.56	N 32 10 39.91 W 103 55 50.82	
	13425.00	93.03	5.31	9166.29	5148.15	5105.81	789.43	7.85	428729.21	665888.43	N 32 10 40.85 W 103 55 50.74	
	13520.00	93.27	5.55	9161.07	5242.97	5200.24	798.40	0.36	428823.63	665897.40	N 32 10 41.78 W 103 55 50.64	
	13615.00	93.13	1.95	9155.77	5337.81	5294.88	804.60	3.79	428918.26	665903.60	N 32 10 42.72 W 103 55 50.56	
	13710.00	93.10	1.05	9150.60	5432.58	5389.70	807.09	0.95	429013.08	665908.09	N 32 10 43.66 W 103 55 50.53	
	13800.00	88.90	1.07	9147.29	5522.27	5579.60	810.60	2.21	429202.96	665909.60	N 32 10 44.54 W 103 55 50.48	
	13995.00	91.07	1.46	9147.31	5617.15	5674.57	812.70	2.32	429297.92	665911.70	N 32 10 45.48 W 103 55 50.45	
	14090.00	88.45	359.46	9147.71	5711.96	5769.55	813.46	3.47	429392.90	665912.46	N 32 10 46.42 W 103 55 50.44	
	14185.00	90.14	359.60	9148.88	5806.67	5864.54	812.68	1.79	429487.88	665911.68	N 32 10 47.36 W 103 55 50.44	
	14267.00	91.93	358.64	9147.40	5898.36	5946.51	811.42	2.48	429584.84	665910.42	N 32 10 48.30 W 103 55 50.45	
	14375.00	91.75	359.23	9143.93	5995.89	6054.44	809.42	0.57	429677.76	665908.42	N 32 10 49.17 W 103 55 50.47	
	14470.00	92.10	356.50	9140.74	6100.29	6149.31	805.88	2.90	429772.62	665904.88	N 32 10 50.24 W 103 55 50.51	
	14565.00	92.37	353.29	9137.03	6284.02	6343.85	797.43	3.39	429867.16	665896.43	N 32 10 51.17 W 103 55 50.51	
	14660.00	91.62	355.64	9133.73	6377.65	6438.34	788.28	2.60	429961.64	665887.28	N 32 10 52.11 W 103 55 50.60	
	14755.00	91.27	356.02	9131.33	6471.67	6533.06	781.37	0.54	430056.35	665880.37	N 32 10 53.05 W 103 55 50.70	
	14849.00	90.62	357.84	9129.78	6564.94	6628.90	776.34	2.06	430150.19	665875.34	N 32 10 53.98 W 103 55 50.78	
	14945.00	91.45	355.95	9128.05	6660.19	6722.74	771.14	2.15	430246.02	665870.14	N 32 10 54.91 W 103 55 50.84	
	15040.00	89.35	359.66	9127.38	6754.62	6817.65	767.50	4.49	430340.92	665866.51	N 32 10 55.86 W 103 55 50.93	
	15229.00	89.97	359.63	9128.48	6848.33	6911.64	766.64	0.40	430434.90	665865.64	N 32 10 56.80 W 103 55 50.94	
	15324.00	90.14	358.36	9128.99	6943.03	6996.63	765.75	0.78	430529.89	665864.75	N 32 10 57.73 W 103 55 50.94	
	15419.00	92.30	3.03	9126.96	7037.67	7001.61	764.08	1.35	430624.87	665863.08	N 32 10 58.67 W 103 55 50.96	
	15609.00	91.38	5.15	9120.86	7132.46	7096.55	765.23	5.41	430719.80	665864.23	N 32 10 59.61 W 103 55 50.96	
	15704.00	89.93	3.33	9119.78	7232.35	7285.96	778.77	1.22	430809.19	665877.78	N 32 11 0.55 W 103 55 50.94	
	15799.00	8										

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS ("/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	18078.00	88.93	5.56	9137.50	9774.53	9744.70	768.75	1.96	433367.75	665867.75	N 32 11 26.75	W 103 55 50.78
	18173.00	88.83	6.02	9139.36	9869.46	9839.20	778.33	0.50	433462.24	665877.33	N 32 11 27.69	W 103 55 50.67
	18268.00	91.45	5.36	9139.12	9964.41	9933.72	787.75	2.84	433556.75	665886.75	N 32 11 28.62	W 103 55 50.55
	18363.00	94.34	5.40	9134.33	10059.25	10028.17	796.65	3.04	433651.20	665895.65	N 32 11 29.56	W 103 55 50.45
	18458.00	96.90	4.08	9125.02	10153.77	10122.38	804.46	3.03	433745.40	665903.46	N 32 11 30.49	W 103 55 50.35
	18553.00	97.84	1.19	9112.83	10247.95	10216.48	808.79	3.18	433839.49	665907.79	N 32 11 31.42	W 103 55 50.30
	18648.00	95.93	357.71	9101.44	10341.95	10310.78	807.88	4.16	433933.78	665906.88	N 32 11 32.35	W 103 55 50.30
	18743.00	91.48	354.02	9095.30	10435.77	10405.29	801.04	6.08	434028.29	665900.04	N 32 11 33.29	W 103 55 50.38
	18838.00	85.70	352.12	9097.64	10528.99	10499.52	789.59	6.40	434122.51	665888.59	N 32 11 34.22	W 103 55 50.51
	18933.00	84.56	350.43	9105.71	10621.33	10593.08	775.23	2.14	434216.06	665874.23	N 32 11 35.15	W 103 55 50.67
	19028.00	84.80	348.31	9114.52	10712.86	10686.04	757.79	2.24	434308.02	665856.79	N 32 11 36.07	W 103 55 50.87
	19123.00	84.52	351.36	9123.36	10804.58	10779.13	741.09	3.21	434402.10	665840.10	N 32 11 36.99	W 103 55 51.06
	19218.00	84.11	354.82	9132.77	10897.40	10872.97	729.72	3.65	434495.93	665823.73	N 32 11 37.92	W 103 55 51.19
	19313.00	84.25	359.12	9142.41	10991.19	10967.32	724.73	4.51	434590.27	665826.08	N 32 11 38.85	W 103 55 51.24
	19408.00	83.24	374	9152.77	11085.50	11061.70	727.08	4.95	434684.64	665835.52	N 32 11 39.79	W 103 55 51.21
	19503.00	82.24	7.76	9164.78	11179.67	11155.44	736.52	4.33	434778.38	665851.72	N 32 11 40.71	W 103 55 51.10
	19598.00	80.85	12.11	9178.75	11273.10	11247.98	752.72	4.76	434870.91	665855.37	N 32 11 41.63	W 103 55 50.90
Final MWD	19615.00	80.49	13.04	9181.51	11289.69	11264.35	756.37	5.80	434887.28	665865.38	N 32 11 42.22	W 103 55 50.86
Survey	19660.00	80.49	13.04	9188.94	11333.51	11307.59	766.38	0.00	434930.51			
Proj. to Bit												

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 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	26.500	1/98.425	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 26H Gyro+MWD 0-19,660'
	1	26.500	26.500	Act Sins	30.000	30.000	NAL_NSG+MSHOT-Depth Only	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 26H Gyro+MWD 0-19,660'
	1	26.500	652.680	Act Sins	30.000	30.000	NAL_NSG+MSHOT	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 26H
	1	652.680	18363.000	Act Sins	30.000	30.000	NAL_MWD_PLUS_0.5_DEG	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 26H
	1	18363.000	19660.000	Act Sins	30.000	30.000	NAL_MWD_HDGM+MS	Original Borehole / Oxy Corral Canyon 36-25 Federal Com 26H