

Reservoir Development

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

NM OIL CONSERVATION
ARTESIA DISTRICT

MAR 03 2016



RECEIVED

January 23, 2016

OXY USA INCORPORATED
5 GREENWAY PLAZA STE 110
HOUSTON, TX 77046-0521

Re:

CLIENT: OXY USA INCORPORATED
WELL: Cypress 33 Federal 8H
FIELD: Bonespring
RIG: H&P 615
COUNTY: Eddy
API NO: 30-015-43075
JOB NO: 15MLD2440

Sec 33 T23S R29E Mer NMP NWNW 150FNL 780FWL
N 32.26805 W 103.99539

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	Cypress 33 Federal 8H Original Hole	410.00 Ft to 13305.00 Ft	January 5, 2016 to January 23, 2016	SlimPulse & HDS- 1R

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

Mike Stephens
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:
Sec 33 T23S R29E Mer NMP NWNW 150FNL 780FWL
N 32.26805 W 103.99539

I, Kurt Valentine certify that; I am employed by Schlumberger Drilling and Measurements; that I did on the day(s) of January 05, 2016 through January 23, 2016, conduct or supervise the taking of the SlimPulse & HDS-1R surveys from a depth of 410.00 feet to a depth of 13305.00 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 INCORPORATED for the Cypress 33 Federal 8H Well (Original Hole) API No. 30-015-43075 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.

Signed by Murad Aliyev,
on behalf of Kurt Valentine

By
Kurt Valentine
MWD

A handwritten signature of Kurt Valentine, appearing to be 'K. Valentine'.

Subscribed and Sworn to before me this 10th day of February (month) 2016 (yr)

My Commission expires:

January 2, 2018

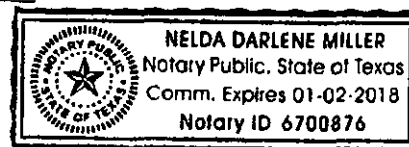
A handwritten signature of the Notary Public, appearing to be 'Nelda Darlene Miller'.

Notary Public

(signature)

Harris Co, Texas

(County State)



Oxy Cypress 33 Fed Com 8H MWD+DMAG 0ft-13356ft Survey Geodetic Report

(Def Survey)



Report Date: February 10, 2016 - 10:30 AM Client: OXY Field: NM Eddy County (NAD 27) Structure / Slot: Oxy Cypress 33 Federal Com. 8H / Oxy Cypress Federal Com. 8H Well: Oxy Cypress Federal Com. 8H Borehole: Oxy Cypress Federal Com. 8H- Original Borehole UWI / API#: Unknown / Unknown Survey Name: Oxy Cypress 33 Fed Com 8H MWD+DMAG 0ft-13356ft Survey Date: January 04, 2016 Tort / AHD / DDI / ERD Ratio: 196.164° / 4999.762 ft / 8.176 / 0.572 Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet Location Lat / Long: N 32° 16' 4.86534", W 103° 59' 43.40396" Location Grid N/E Y/X: N 461397.300 NUS, E 604455.000 NUS CRS Grid Convergence Angle: 0.1804 ° Grid Scale Factor: 0.99992159 Version / Patch: 2.9.365.0	Survey / DLS Computation: Minimum Curvature / Lubinski Vertical Section Azimuth: 180.200 ° (Grid North) Vertical Section Origin: 0.000 ft, 0.000 ft TVD Reference Datum: RKB TVD Reference Elevation: 3030.700 ft above MSL Seabed / Ground Elevation: 3004.200 ft above MSL Magnetic Declination: 7.350 ° Total Gravity Field Strength: 998.4685mgn (9.80665 Based) Gravity Model: GARM Total Magnetic Field Strength: 48287.021 nT Magnetic Dip Angle: 60.131 ° Declination Date: January 04, 2016 Magnetic Declination Model: HDGM 2015 North Reference: Grid North Grid Convergence Used: 0.1804 ° Total Corr Mag North->Grid North: 7.1700 ° Local Coord Referenced To: Structure Reference Point	Minimum Curvature / Lubinski 180.200 ° (Grid North) 0.000 ft, 0.000 ft RKB 3030.700 ft above MSL 3004.200 ft above MSL 7.350 ° 998.4685mgn (9.80665 Based) GARM 48287.021 nT 60.131 ° January 04, 2016 HDGM 2015 Grid North 0.1804 ° 7.1700 ° Structure Reference Point
---	--	--

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 ° ' ")
Tie-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	461397.30	604455.00	N 32 16 4.97 W 103 59 43.40	
Ground Level	26.50	0.00	0.00	26.50	0.00	0.00	0.00	0.00	461397.30	604455.00	N 32 16 4.97 W 103 59 43.40	
	410.00	1.14	179.29	409.97	3.81	-3.81	0.05	0.30	461393.49	604455.05	N 32 16 4.93 W 103 59 43.40	
	591.00	1.41	180.49	590.93	7.84	-7.84	0.05	0.15	461389.46	604455.05	N 32 16 4.89 W 103 59 43.40	
	771.00	1.67	184.30	770.86	12.67	-12.67	-0.17	0.16	461384.63	604454.83	N 32 16 4.84 W 103 59 43.41	
	953.00	1.93	192.54	952.77	18.31	-18.31	-1.03	0.20	461378.99	604453.97	N 32 16 4.78 W 103 59 43.42	
	1044.00	2.11	194.02	1043.72	21.44	-21.43	-1.77	0.21	461375.87	604453.23	N 32 16 4.75 W 103 59 43.43	
	1137.00	2.02	197.06	1136.66	24.67	-24.66	-2.66	0.15	461372.64	604452.34	N 32 16 4.72 W 103 59 43.44	
	1232.00	1.06	186.78	1231.62	27.14	-27.13	-3.25	1.05	461370.17	604451.74	N 32 16 4.70 W 103 59 43.44	
	1326.00	0.53	121.89	1325.61	28.23	-28.22	-2.99	1.02	461369.08	604452.01	N 32 16 4.69 W 103 59 43.44	
	1421.00	0.53	128.13	1420.61	28.73	-28.73	-2.27	0.06	461368.58	604452.73	N 32 16 4.68 W 103 59 43.43	
	1515.00	0.62	130.25	1514.61	29.33	-29.32	-1.54	0.10	461367.98	604453.46	N 32 16 4.68 W 103 59 43.42	
	1609.00	0.62	139.51	1608.60	30.04	-30.04	-0.82	0.11	461367.26	604454.18	N 32 16 4.67 W 103 59 43.41	
	1703.00	0.70	142.83	1702.59	30.88	-30.88	-0.15	0.09	461366.42	604454.85	N 32 16 4.66 W 103 59 43.41	
	1797.00	0.70	158.28	1796.59	31.87	-31.87	0.41	0.20	461365.43	604455.41	N 32 16 4.65 W 103 59 43.40	
	1891.00	0.97	164.14	1890.58	33.17	-33.17	0.84	0.30	461364.13	604455.84	N 32 16 4.64 W 103 59 43.40	
	1985.00	1.14	159.94	1984.56	34.81	-34.82	1.38	0.20	461362.49	604456.38	N 32 16 4.62 W 103 59 43.39	
	2079.00	1.58	140.01	2078.54	36.68	-36.69	2.53	0.68	461360.61	604457.53	N 32 16 4.60 W 103 59 43.38	
	2174.00	2.02	129.48	2173.49	38.74	-38.76	4.67	0.58	461358.55	604459.67	N 32 16 4.58 W 103 59 43.35	
	2362.00	2.99	110.93	2361.31	42.57	-42.61	11.80	0.67	461354.69	604466.80	N 32 16 4.54 W 103 59 43.27	
	2456.00	3.17	107.45	2455.17	44.21	-44.27	16.57	0.28	461353.03	604471.57	N 32 16 4.53 W 103 59 43.21	
	2549.00	3.43	103.14	2548.02	45.60	-45.67	21.74	0.39	461351.63	604476.73	N 32 16 4.51 W 103 59 43.15	
	2643.00	3.87	104.57	2641.83	47.01	-47.11	27.54	0.48	461350.19	604482.54	N 32 16 4.50 W 103 59 43.08	
	2831.00	3.78	110.45	2829.41	50.73	-50.87	39.49	0.21	461346.43	604494.49	N 32 16 4.46 W 103 59 42.95	
	2873.00	3.78	111.73	2871.32	51.72	-51.87	42.08	0.20	461345.44	604497.07	N 32 16 4.45 W 103 59 42.92	
	3021.00	2.75	116.74	3019.08	55.10	-55.27	49.78	0.72	461342.03	604504.78	N 32 16 4.42 W 103 59 42.83	
	3210.00	0.14	237.82	3208.01	57.25	-57.44	53.64	1.50	461339.86	604508.63	N 32 16 4.40 W 103 59 42.78	
	3396.00	0.18	2.47	3396.01	57.09	-57.28	53.45	0.15	461340.03	604508.45	N 32 16 4.40 W 103 59 42.78	
	3587.00	0.19	261.51	3585.01	56.85	-57.03	53.16	0.15	461340.27	604508.16	N 32 16 4.40 W 103 59 42.79	
	3775.00	0.12	318.40	3773.00	56.74	-56.93	52.73	0.08	461340.38	604507.72	N 32 16 4.40 W 103 59 42.79	
	3964.00	0.15	284.51	3962.00	56.53	-56.71	52.35	0.05	461340.59	604507.34	N 32 16 4.40 W 103 59 42.80	
	4152.00	0.23	23.61	4150.00	56.12	-56.30	52.25	0.16	461341.00	604507.25	N 32 16 4.41 W 103 59 42.80	
	4340.00	0.12	75.55	4338.00	55.72	-55.90	52.60	0.10	461341.40	604507.60	N 32 16 4.41 W 103 59 42.79	
	4528.00	0.14	74.59	4526.00	55.80	-55.79	53.02	0.01	461341.51	604508.02	N 32 16 4.41 W 103 59 42.79	
	4622.00	0.20	233.50	4620.00	55.67	-55.86	53.00	0.36	461341.45	604508.00	N 32 16 4.41 W 103 59 42.79	
	4716.00	0.12	158.86	4714.00	55.86	-56.05	52.91	0.22	461341.25	604507.90	N 32 16 4.41 W 103 59 42.79	
	4810.00	0.12	139.47	4808.00	56.04	-56.22	53.01	0.04	461341.08	604508.01	N 32 16 4.41 W 103 59 42.79	
	4904.00	0.22	252.00	4902.00	56.17	-56.35	52.91	0.31	461340.95	604507.90	N 32 16 4.41 W 103 59 42.79	
	4998.00	0.17	211.57	4996.00	56.35	-56.53	52.66	0.15	461340.77	604507.68	N 32 16 4.40 W 103 59 42.79	
	5186.00	0.15	39.27	5184.00	56.38	-56.56	52.65	0.17	461340.75	604507.65	N 32 16 4.40 W 103 59 42.79	
	5280.00	0.15	152.89	5278.00	56.38	-56.57	52.78	0.28	461340.74	604507.78	N 32 16 4.40 W 103 59 42.79	
	5374.00	0.14	267.54	5372.00	56.50	-56.68	52.73	0.26	461340.62	604507.72	N 32 16 4.40 W 103 59 42.79	
	5468.00	0.12	104.45	5466.00	56.53	-56.71	52.71	0.28	461340.59	604507.71	N 32 16 4.40 W 103 59 42.79	
	5562.00	0.14	193.40	5560.00	56.67	-56.85	52.78	0.20	461340.45	604507.78	N 32 16 4.40 W 103 59 42.79	
	5656.00	0.15	144.33	5654.00	56.88	-57.07	52.83	0.13	461340.24	604507.82	N 32 16 4.40 W 103 59 42.79	
	5748.00	0.19	101.45	5746.00	57.01	-57.20	53.05	0.14	461340.11	604508.04	N 32 16 4.40 W 103 59 42.79	
	5938.00	0.14	28.07	5936.00	56.86	-57.05	53.46	0.10	461340.25	604508.45	N 32 16 4.40 W 103 59 42.78	
	6032.00	0.15	274.99	6030.00	56.75	-56.94	53.39	0.26	461340.37	604508.38	N 32 16 4.40 W 103 59 42.78	
	6127.00	0.12	356.69	6125.00	56.64	-56.82	53.25	0.19	461340.48	604508.25	N 32 16 4.40 W 103 59 42.79	
	6221.00	0.18	11.47	6219.00	56.39	-56.58	53.28	0.07	461340.72	604508.27	N 32 16 4.40 W 103 59 42.79	
	6315.00	0.19	147.77	6313.00	56.38	-56.57	53.39	0.36	461340.74	604508.38	N 32 16 4.40 W 103 59 42.78	
	6409.00	0.19	16.57	6407.00	56.36	-56.55	53.51	0.36	461340.75	604508.51	N 32 16 4.40 W 103 59 42.78	
	6503.00	0.20	213.59	6501.00	56.36	-56.54	53.46	0.41	461340.75	604508.46	N 32 16 4.40 W 103 59 42.78	
	6597.00	0.22	286.35	6595.00	56.44	-56.63	53.20	0.26	461340.68	604508.20	N 32 16 4.40 W 103 59 42.79	
	6691.00	0.59	335.63	6688.99	55.95	-56.14	52.83	0.51	461341.17	604507.83	N 32 16 4.41 W 103 59 42.79	
	6784.00	0.53	329.72	6781.99	55.15	-55.33	52.42	0.09	461341.97	604507.41	N 32 16 4.42 W 103 59 42.80	
	6879.00	0.46	333.61	6876.99	54.43	-54.61	52.03	0.08	461342.69	604507.02	N 32 16 4.42 W 103 59 42.80	
	6973.00	0.35	353.37	6970.98	53.80	-53.98	51.82	0.19	461343.32	604506.82	N 32 16 4.43 W 103 59 42.80	
	7067.00	0.57	355.78	7064.98	53.05	-53.23	51.76	0.23	461344.07	604506.75	N 32 16 4.44 W 103 59 42.80	
	7160.00	1.39	347.84	7157.97	51.49	-51.67	51.49	0.90	461345.64	604506.48	N 32 16 4.45 W 103 59 42.81	
	7255.00	0.24	176.69	7252.96	50.56	-50.74	51.25	1.71	461346.56	604506.25	N 32 16 4.46 W 103 59 42.81	
	7349.00	0.97	194.50	7346.95	51.53	-51.71	51.07	0.79	461345.60	604506.06	N 32 16 4.45 W 103 59 42.81	
	7443.00	0.68	328.55	7440.95	51.82	-52.00	50.58	1.62	461345.30	604505.57	N 32 16 4.45 W 103 59 42.82	
	7537.00	1.31	319.88	7534.93	50.53	-50.70	49.59	0.69	461346.60	604504.59	N 32 16 4.46 W 103 59 42.83	
	7631.00	1.99	311.98	7628.89	48.62	-48.79	47.69	0.76	461348.51	604502.68	N 32 16 4.48 W 103 59 42.85	
	7806.00	0.65	11.20	7803.85	45.62	-45.78	45.62	1.00	461351.53	604500.62	N 32 16 4.51 W 103 59 42.87	
	7900.00	0.40	326.38	7897.85	44.82	-44.98	45.54	0.49	461352.33	604500.54	N 32 16 4.52 W 103 59 42.88	
	7994.00	2.04	206.74	7991.83	46.05	-46.20	44.61	2.41	461351.10	604499.60	N 32 16 4.51 W 103 59 42.89	
	8088.00	1.23	210.08	8085.79	48.42	-48.57	43.35	0.87	461348.73	604498.34	N 32 16 4.48 W 103 59 42.90	
	8182.00	9.12	163.49	8179.35	56.45	-56.60	44.96	8.86	461340.70	604499.96	N 32 16 4.40 W 103 59 42.88	
	8276.00	15.38	142.79	8271.20	73.52	-73.71	54.64	8.05	461322.60	604509.63	N 32 16 4.23 W 103 59 42.77	

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 ° ' ")
	8370.00	23.88	146.24	8359.66	99.25	-99.51	72.79	9.10	461297.80	604527.79	N 32 15 3.98 W 103 59 42.56	
	8464.00	26.66	161.28	8444.74	135.00	-135.34	90.15	7.42	461261.97	604545.14	N 32 16 3.62 W 103 59 42.36	
	8559.00	37.45	178.66	8525.31	184.31	-184.65	97.70	14.84	461212.66	604552.69	N 32 16 3.14 W 103 59 42.27	
	8653.00	46.24	187.95	8595.33	246.70	-247.03	93.66	11.42	461150.29	604548.66	N 32 16 2.52 W 103 59 42.32	
	8747.00	58.63	194.10	8652.57	319.61	-319.89	79.13	14.15	461077.43	604534.12	N 32 16 1.80 W 103 59 42.49	
	8832.00	65.50	195.98	8692.37	392.14	-392.35	59.62	8.32	461004.98	604514.62	N 32 16 1.08 W 103 59 42.72	
	8850.00	67.29	197.26	8703.18	415.87	-416.06	52.54	7.95	460981.27	604507.54	N 32 16 0.85 W 103 59 42.81	
	8953.00	78.96	193.48	8730.43	502.55	-502.65	28.83	12.99	460894.69	604483.83	N 32 15 59.99 W 103 59 43.09	
	9044.00	92.79	190.01	8736.97	591.25	-591.29	10.42	15.66	460806.06	604465.42	N 32 15 59.11 W 103 59 43.30	
	9154.00	93.37	188.76	8731.06	699.68	-699.66	-7.49	1.25	460697.70	604447.51	N 32 15 58.04 W 103 59 43.52	
	9248.00	93.95	186.72	8725.06	792.67	-792.61	-20.12	2.25	460604.76	604434.88	N 32 15 57.12 W 103 59 43.67	
	9436.00	93.10	183.82	8713.50	979.56	-979.44	-37.35	1.60	460417.94	604417.65	N 32 15 55.27 W 103 59 43.87	
	9624.00	92.17	180.94	8704.85	1167.20	-1167.05	-45.15	1.61	460230.34	604409.85	N 32 15 53.42 W 103 59 43.97	
	9735.00	91.52	179.47	8701.28	1278.14	-1277.99	-45.55	1.45	460119.41	604409.46	N 32 15 52.32 W 103 59 43.98	
	9792.00	91.72	178.20	8699.67	1335.10	-1334.96	-44.39	2.25	460062.45	604410.62	N 32 15 51.76 W 103 59 43.97	
	9903.00	92.27	178.26	8695.80	1445.97	-1445.83	-40.96	0.50	459951.58	604414.04	N 32 15 50.66 W 103 59 43.93	
	9997.00	90.20	178.84	8693.78	1539.90	-1539.78	-38.58	2.29	459857.65	604416.42	N 32 15 49.73 W 103 59 43.91	
	10091.00	87.55	179.52	8695.62	1633.86	-1633.74	-37.24	2.91	459763.69	604417.76	N 32 15 48.80 W 103 59 43.90	
	10185.00	86.21	179.62	8700.74	1727.71	-1727.60	-36.53	1.43	459668.84	604418.47	N 32 15 47.87 W 103 59 43.89	
	10279.00	87.73	179.01	8705.71	1821.57	-1821.45	-35.41	1.74	459575.99	604419.59	N 32 15 46.94 W 103 59 43.88	
	10373.00	89.55	179.32	8707.94	1915.52	-1915.41	-34.04	1.96	459482.04	604420.04	N 32 15 46.01 W 103 59 43.87	
	10467.00	88.83	178.64	8709.27	2009.49	-2009.39	-32.37	1.05	459388.07	604422.63	N 32 15 45.08 W 103 59 43.85	
	10562.00	87.56	178.67	8712.26	2104.41	-2104.31	-30.14	1.34	459293.16	604424.96	N 32 15 44.14 W 103 59 43.83	
	10674.00	85.86	178.33	8718.69	2216.17	-2216.09	-27.21	1.55	459181.39	604427.79	N 32 15 43.04 W 103 59 43.80	
	10762.00	85.63	178.03	8725.22	2303.87	-2303.80	-24.43	0.43	459093.69	604430.57	N 32 15 42.17 W 103 59 43.77	
	10856.00	88.83	178.95	8729.76	2397.71	-2397.64	-21.95	3.54	458999.85	604433.05	N 32 15 41.24 W 103 59 43.75	
	10850.00	91.58	178.37	8729.42	2491.66	-2491.61	-19.76	2.99	458905.89	604435.25	N 32 15 40.31 W 103 59 43.73	
	11044.00	91.27	178.19	8727.08	2585.56	-2585.54	-16.93	0.39	458811.97	604438.07	N 32 15 39.38 W 103 59 43.70	
	11138.00	90.34	177.04	8725.76	2679.47	-2679.44	-13.01	1.57	458718.07	604441.99	N 32 15 38.45 W 103 59 43.65	
	11326.00	89.72	178.37	8725.67	2867.29	-2867.29	-5.48	0.78	458530.24	604449.52	N 32 15 36.59 W 103 59 43.67	
	11514.00	90.24	179.65	8725.73	3055.24	-3055.25	-2.23	0.73	458342.29	604452.77	N 32 15 34.73 W 103 59 43.54	
	11608.00	89.55	179.77	8725.90	3149.24	-3149.25	-1.76	0.75	458248.30	604453.24	N 32 15 33.80 W 103 59 43.54	
	11702.00	87.76	177.77	8728.11	3243.18	-3243.20	0.26	2.85	458154.36	604455.26	N 32 15 32.87 W 103 59 43.52	
	11796.00	90.93	180.10	8729.18	3337.13	-3337.16	2.01	4.19	458060.41	604457.01	N 32 15 31.94 W 103 59 43.50	
	11890.00	90.96	181.03	8727.63	3431.11	-3431.14	1.08	0.99	457966.44	604456.08	N 32 15 31.01 W 103 59 43.52	
	11985.00	92.07	181.12	8725.07	3526.07	-3526.09	-0.70	1.17	457871.50	604454.30	N 32 15 30.07 W 103 59 43.54	
	12079.00	91.89	180.90	8721.67	3620.00	-3620.01	-2.36	0.30	457777.58	604452.64	N 32 15 29.14 W 103 59 43.56	
	12359.00	90.83	181.41	8715.23	3899.88	-3899.87	-8.00	0.42	457497.74	604447.00	N 32 15 26.37 W 103 59 43.64	
	12455.00	90.48	181.96	8714.13	3995.84	-3995.83	-10.82	0.68	457401.80	604444.18	N 32 15 25.43 W 103 59 43.68	
	12549.00	89.48	181.42	8714.16	4089.81	-4089.78	-13.60	1.21	457307.85	604441.41	N 32 15 24.50 W 103 59 43.71	
	12643.00	89.11	181.38	8715.32	4183.78	-4183.75	-15.89	0.40	457213.89	604439.11	N 32 15 23.57 W 103 59 43.74	
	12737.00	87.83	181.00	8717.83	4277.73	-4277.69	-17.84	1.42	457119.95	604437.16	N 32 15 22.64 W 103 59 43.77	
	12831.00	90.14	179.56	8719.50	4371.70	-4371.67	-18.30	2.90	457025.98	604436.70	N 32 15 21.71 W 103 59 43.78	
	12925.00	89.86	178.43	8719.50	4465.68	-4465.65	-16.65	1.24	456932.01	604438.35	N 32 15 20.78 W 103 59 43.76	
	13019.00	89.00	178.38	8720.43	4559.63	-4559.61	-14.04	0.92	456838.06	604440.96	N 32 15 19.85 W 103 59 43.73	
	13113.00	88.35	178.40	8722.60	4653.56	-4653.55	-11.40	0.69	456744.13	604443.60	N 32 15 18.92 W 103 59 43.71	
	13207.00	87.42	178.33	8726.07	4747.44	-4747.44	-8.72	0.99	456650.24	604446.28	N 32 15 17.99 W 103 59 43.68	
Last Survey	13305.00	86.97	179.11	8730.87	4845.29	-4845.30	-6.53	0.92	456552.39	604448.47	N 32 15 17.02 W 103 59 43.66	
Proj to Bit	13356.00	86.97	179.11	8733.57	4896.21	-4896.22	-5.74	0.00	456501.47	604449.26	N 32 15 16.52 W 103 59 43.65	

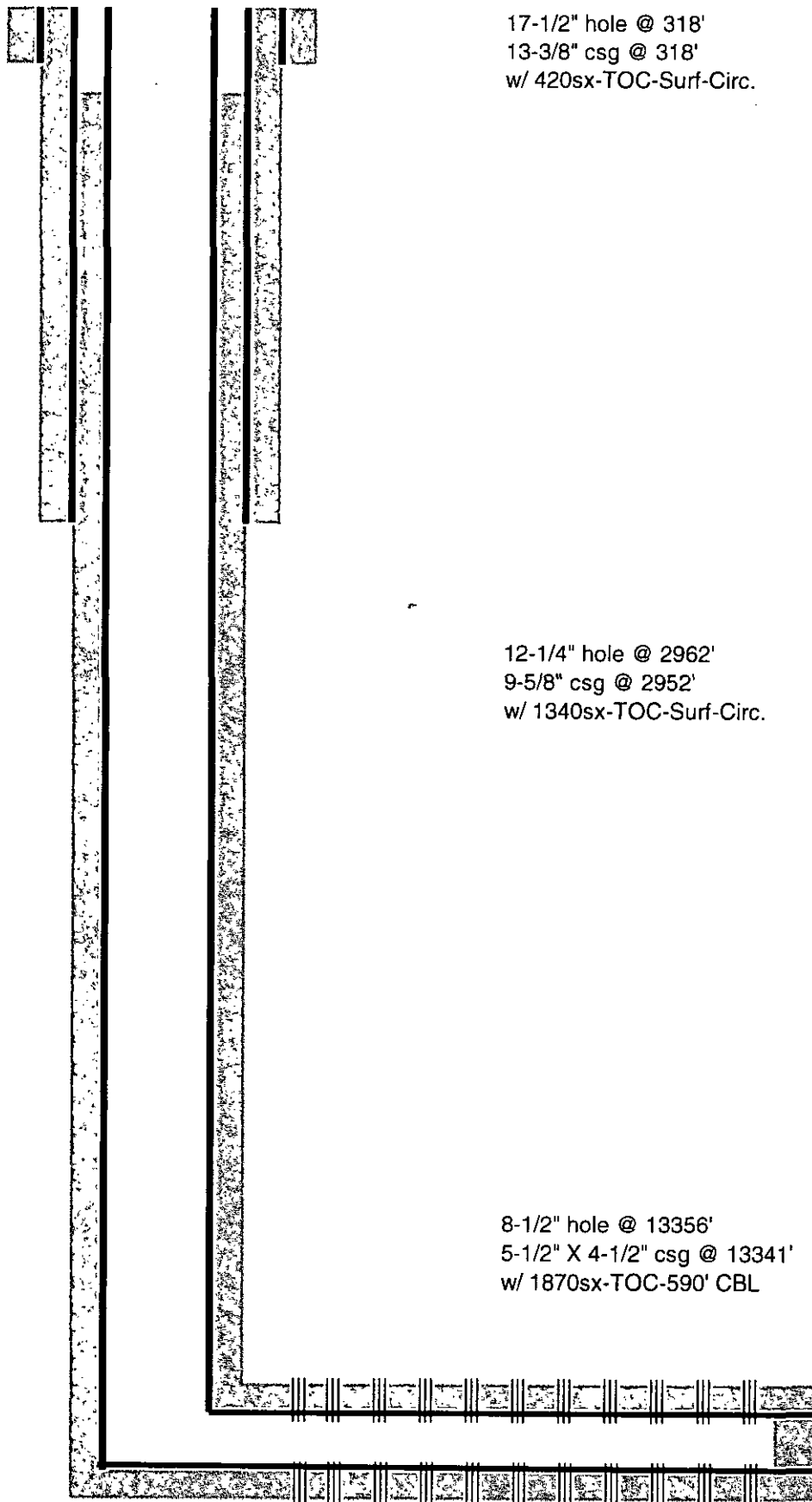
Survey Type: Def Survey

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	Act Stns	30.000	30.000	SLB_MWD-STD_HDGM-Depth Only	Oxy Cypress Federal Com. 8H- Original Borehole / Oxy Cypress 33 Fed Com 8H MWD+DMAG Off
	1	26.500	410.000	1/98 425	30.000	30.000	SLB_MWD-STD_HDGM	Oxy Cypress Federal Com. 8H- Original Borehole / Oxy Cypress
	1	410.000	9792.000	Act Stns	30.000	30.000	SLB_MWD-STD_HDGM	Oxy Cypress Federal Com. 8H- Original Borehole / Oxy Cypress
	1	9792.000	10674.000	Act Stns	30.000	30.000	SLB_MWD+DMAG	Oxy Cypress Federal Com. 8H- Original Borehole / Oxy Cypress
	1	10674.000	13356.000	Act Stns	30.000	30.000	SLB_MWD-STD_HDGM	Oxy Cypress Federal Com. 8H- Original Borehole / Oxy Cypress



OXY USA INC.
Cypress 33 Federal Com #8H
API No. 30-015-43075



Perfs @ 9003-13234'

TD- 13356'M 8734'V