Drilling Services, Central U.S. Land

Reservoir Development
Drilling & Measurements (Anadrill)
4301 SW 44th St
Oklahoma City, Oklahoma 73119 USA
Phone: (405) 682-2284
Fax: (405) 682-3937

Schlumberger

30-015-41819

March 21, 2014

Cimarex
600 N MARIENFELD STREET SUITE 600

MIDLAND ,TX 79701

S6-T25S-R27E 330 FSL 2190 FEL
N 32.15274 W 104.22806

Re:

CLIENT:	Cimarex Energy Co.
WELL:	Scoter 6 Federal 3H
FIELD:	Cottonwood Draw, B.S.
RIG:	Cactus 116
COUNTY:	Eddy
API NO:	30-015-41819
JOB NO:	14MLD0075

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements , a division of Schlumberger Technology Corporation .
Other information required by your office is as follows.

Name & Title of Surveyor	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
Jesse Ritch MWD	Scoter 6 Federal 3H Original Hole	6664.00 Ft to 11870.00 Ft	March 10, 2014 to March 20, 2014	SlimPulse

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

Joseph Hogan
Field Service Manager

Oilfield Services Central U S Land

Schlumberger

Reservoir Development
Drilling & Measurements (Anadrill)
4301 SW 44th St
Oklahoma City, Oklahoma 73119 USA
Phone: (405) 682-2284
Fax: (405).682-3937

Well Reference:
S6-T25S-R27E 330 FSL 2190 FEL
N 32.15274 W 104.22806

I, Jesse Ritch certify that; I am employed by Drilling & Measurements (formerly Anadrill), a division of Schlumberger Technology Corporation; that I did on the day(s) of March 10, 2014 through March 20, 2014, conduct or supervise the taking of the SlimPulse surveys from a depth of 6664.00 feet to a depth of 11870.00 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 Cimarex Energy Co. for the Scoter 6 Federal 3H Well (Original Hole) API No. 30-015-41819 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.

On behalf of
Jesse Ritch
MWD

Subscribed and Sworn to before me this 21st day of March (month) 2014 (yr)

My Commission expires:
September 5, 2016

MICHELLE ELLWOOD
MY COMMISSION EXPIRES
September 5, 2016

Michelle Ellwood
(signature)
Notary Public

Midland, TX
(County State)

Cimarex Scoter 6 Federal #3H XEM+MWD 0ft to 11940ft MD

(Def Survey)

Report Date:	March 20, 2014 - 09:01 AM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	Cimarex	**Vertical Section Azimuth:**	1.374 ° (Grid North)
Field:	NM Eddy County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Cactus 116 / Cimarex Scoter 6 Federal #3H	**TVD Reference Datum:**	RKB
Well:	Cimarex Scoter 6 Federal #3H	**TVD Reference Elevation:**	3326.000 ft above
Borehole:	Original Borehole	**Seabed / Ground Elevation:**	3308.000 ft above
UWI / API#:	Unknown / Unknown	**Magnetic Declination:**	7.666 °
Survey Name:	Cimarex Scoter 6 Federal #3H XEM+MWD 0ft to 11940ft MD	**Total Gravity Field Strength:**	998.4900mgn (9.80665 Based)
Survey Date:	March 04, 2014	**Total Magnetic Field Strength:**	48201.492 nT
Tort / AHD / DDI / ERD Ratio:	211.575 ° / 4901.254 ft / 6.224 / 0.663	**Magnetic Dip Angle:**	59.921 °
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Declination Date:**	March 04, 2014
Location Lat / Long:	N 32° 9' 9.85345", W 104° 13' 40.99822"	**Magnetic Declination Model:**	BGGM 2013
Location Grid N/E Y/X:	N 419317.000 ftUS, E 573918.300 ftUS	**North Reference:**	Grid North
CRS Grid Convergence Angle:	0.0560 °	**Grid Convergence Used:**	0.0560 °
Grid Scale Factor:	0.99991031	**Total Corr Mag North->Grid North:**	7.6102 °
		Local Coord Referenced To:	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 ° ' ")
SHL Scoter 6 Federal #3H	0.00	0.00	1.37	0.00	0.00	0.00	0.00	N/A	419317.00	573918.30	N 32 9 9.85	W 104 13 41.00
	175.00	1.19	248.92	174.99	-0.69	-0.65	-1.70	0.68	419316.35	573916.60	N 32 9 9.85	W 104 13 41.02
	236.00	1.58	210.82	235.97	-1.67	-1.60	-2.72	1.60	419315.40	573915.58	N 32 9 9.84	W 104 13 41.03
	241.00	1.58	209.89	240.97	-1.79	-1.72	-2.79	0.51	419315.28	573915.51	N 32 9 9.84	W 104 13 41.03
	299.00	1.49	204.71	298.95	-3.18	-3.10	-3.50	0.29	419313.90	573914.80	N 32 9 9.82	W 104 13 41.04
	361.00	1.41	208.70	360.93	-4.60	-4.50	-4.20	0.21	419312.50	573914.10	N 32 9 9.81	W 104 13 41.05
	448.09	1.32	204.31	447.99	-6.48	-6.36	-5.13	0.16	419310.64	573913.17	N 32 9 9.79	W 104 13 41.06
	565.91	1.41	212.40	565.78	-8.97	-8.82	-6.47	0.18	419308.18	573911.83	N 32 9 9.77	W 104 13 41.07
	621.86	2.20	5.91	621.72	-8.49	-8.33	-6.73	6.29	419308.67	573911.58	N 32 9 9.77	W 104 13 41.08
	680.47	1.41	219.52	680.32	-7.93	-7.77	-7.07	5.91	419309.23	573911.23	N 32 9 9.78	W 104 13 41.08
	741.37	1.58	214.02	741.20	-9.23	-9.04	-8.02	0.36	419307.96	573910.29	N 32 9 9.76	W 104 13 41.09
	831.68	1.41	219.83	831.47	-11.15	-10.93	-9.42	0.25	419306.07	573908.88	N 32 9 9.75	W 104 13 41.11
	924.13	1.41	221.80	923.90	-12.91	-12.65	-10.91	0.05	419304.35	573907.39	N 32 9 9.73	W 104 13 41.13
	1015.35	1.41	216.40	1015.09	-14.68	-14.39	-12.32	0.15	419302.61	573905.98	N 32 9 9.71	W 104 13 41.14
	1106.68	1.49	229.71	1106.39	-16.39	-16.06	-13.90	0.38	419300.94	573904.40	N 32 9 9.69	W 104 13 41.16
	1283.00	1.41	222.73	1282.65	-19.54	-19.14	-17.12	0.11	419297.67	573901.18	N 32 9 9.66	W 104 13 41.20
	1471.00	1.19	200.49	1470.61	-23.12	-22.66	-19.37	0.29	419294.34	573898.93	N 32 9 9.63	W 104 13 41.22
	1661.00	1.19	159.22	1660.57	-26.81	-26.36	-19.36	0.44	419290.65	573898.94	N 32 9 9.59	W 104 13 41.22
	1987.00	1.80	142.39	1986.46	-33.93	-33.58	-15.04	0.23	419283.43	573903.27	N 32 9 9.52	W 104 13 41.17
	2049.40	1.58	329.82	2048.85	-33.96	-33.61	-14.87	5.41	419283.39	573903.43	N 32 9 9.52	W 104 13 41.17
	2143.86	1.71	138.79	2143.30	-33.88	-33.54	-14.60	3.47	419283.46	573903.71	N 32 9 9.52	W 104 13 41.17
	2239.23	1.58	141.82	2238.63	-35.95	-35.65	-12.85	0.16	419281.35	573905.46	N 32 9 9.50	W 104 13 41.15
	2332.67	1.71	139.71	2332.03	-37.98	-37.72	-11.15	0.15	419279.28	573907.15	N 32 9 9.48	W 104 13 41.13
	2522.91	1.49	141.60	2522.19	-42.00	-41.83	-7.78	0.12	419275.18	573910.53	N 32 9 9.44	W 104 13 41.09
	2616.18	1.32	144.90	2615.44	-43.80	-43.66	-6.40	0.20	419273.35	573911.90	N 32 9 9.42	W 104 13 41.07
	2709.71	1.41	148.72	2708.94	-45.63	-45.52	-5.19	0.14	419271.48	573913.11	N 32 9 9.40	W 104 13 41.06
	2808.39	1.49	147.71	2807.59	-47.72	-47.64	-3.87	0.09	419269.36	573914.43	N 32 9 9.38	W 104 13 41.04
	2901.89	1.49	149.03	2901.06	-49.76	-49.71	-2.60	0.04	419267.29	573915.70	N 32 9 9.36	W 104 13 41.03
	2996.82	1.49	149.42	2995.95	-51.85	-51.84	-1.33	0.01	419265.17	573916.97	N 32 9 9.34	W 104 13 41.01
	3092.25	1.41	149.82	3091.35	-53.91	-53.92	-0.11	0.08	419263.09	573918.19	N 32 9 9.32	W 104 13 41.00
	3186.54	1.41	150.52	3185.61	-55.89	-55.93	1.04	0.02	419261.07	573919.34	N 32 9 9.30	W 104 13 40.99
	3281.75	1.41	146.52	3280.80	-57.86	-57.93	2.26	0.10	419259.08	573920.56	N 32 9 9.28	W 104 13 40.97
	3376.18	1.32	152.81	3375.20	-59.77	-59.86	3.40	0.18	419257.14	573921.70	N 32 9 9.26	W 104 13 40.96
	3470.50	1.10	162.39	3469.50	-61.58	-61.69	4.17	0.32	419255.31	573922.47	N 32 9 9.24	W 104 13 40.95
	3566.42	0.88	159.80	3565.40	-63.13	-63.26	4.71	0.23	419253.74	573923.00	N 32 9 9.23	W 104 13 40.94
	3660.21	1.01	158.70	3659.18	-64.56	-64.71	5.25	0.14	419252.30	573923.55	N 32 9 9.21	W 104 13 40.94
	3755.61	0.88	146.13	3754.57	-65.94	-66.10	5.97	0.26	419250.91	573924.27	N 32 9 9.20	W 104 13 40.93
	3849.82	1.19	148.19	3848.76	-67.35	-67.53	6.89	0.33	419249.47	573925.19	N 32 9 9.19	W 104 13 40.92
	3945.54	0.88	151.93	3944.47	-68.82	-69.03	7.76	0.33	419247.98	573926.06	N 32 9 9.17	W 104 13 40.91
	4039.37	1.19	163.93	4038.28	-70.38	-70.60	8.37	0.40	419246.41	573926.66	N 32 9 9.15	W 104 13 40.90
	4133.78	1.19	171.62	4132.67	-72.28	-72.51	8.78	0.17	419244.50	573927.08	N 32 9 9.14	W 104 13 40.90
	4228.84	1.01	174.52	4227.71	-74.08	-74.32	9.00	0.20	419242.69	573927.30	N 32 9 9.12	W 104 13 40.89
	4323.31	0.70	168.50	4322.17	-75.47	-75.71	9.20	0.34	419241.29	573927.50	N 32 9 9.10	W 104 13 40.89
	4417.20	0.62	157.12	4416.06	-76.49	-76.74	9.51	0.16	419240.26	573927.81	N 32 9 9.09	W 104 13 40.89
	4514.28	0.88	158.52	4513.13	-77.66	-77.92	9.99	0.27	419239.09	573928.29	N 32 9 9.08	W 104 13 40.88
	4607.69	1.01	153.42	4606.53	-79.05	-79.33	10.62	0.17	419237.68	573928.92	N 32 9 9.07	W 104 13 40.88
	4703.41	0.88	171.22	4702.23	-80.52	-80.81	11.11	0.33	419236.20	573929.41	N 32 9 9.05	W 104 13 40.87
	4797.65	0.88	165.03	4796.46	-81.92	-82.22	11.41	0.10	419234.79	573929.70	N 32 9 9.04	W 104 13 40.87
	4890.89	1.19	167.00	4889.69	-83.55	-83.86	11.81	0.33	419233.15	573930.11	N 32 9 9.02	W 104 13 40.86
	4984.75	1.10	165.51	4983.53	-85.36	-85.68	12.25	0.10	419231.33	573930.55	N 32 9 9.01	W 104 13 40.86
	5081.88	1.19	177.99	5080.64	-87.26	-87.59	12.52	0.27	419229.42	573930.82	N 32 9 8.99	W 104 13 40.85
	5177.63	1.10	178.43	5176.37	-89.17	-89.50	12.58	0.09	419227.51	573930.88	N 32 9 8.97	W 104 13 40.85
	5272.47	1.32	179.70	5271.19	-91.17	-91.50	12.61	0.23	419225.51	573930.91	N 32 9 8.95	W 104 13 40.85
	5366.50	1.32	175.62	5365.19	-93.33	-93.67	12.70	0.10	419223.34	573931.00	N 32 9 8.93	W 104 13 40.85
	5461.37	1.19	173.20	5460.04	-95.40	-95.73	12.90	0.15	419221.28	573931.20	N 32 9 8.91	W 104 13 40.85
	5555.63	1.41	168.50	5554.28	-97.50	-97.84	13.25	0.26	419219.17	573931.55	N 32 9 8.89	W 104 13 40.85
	5650.98	1.41	180.71	5649.60	-99.81	-100.16	13.47	0.31	419216.84	573931.77	N 32 9 8.86	W 104 13 40.84
	5747.53	1.58	188.71	5746.11	-102.32	-102.67	13.25	0.28	419214.34	573931.55	N 32 9 8.84	W 104 13 40.85
	5840.21	1.32	198.60	5838.76	-104.61	-104.94	12.72	0.39	419212.07	573931.02	N 32 9 8.81	W 104 13 40.85
	5934.98	0.79	164.10	5933.52	-106.27	-106.61	12.55	0.85	419210.40	573930.85	N 32 9 8.80	W 104 13 40.85
	6029.39	0.79	262.63	6027.92	-106.99	-107.32	12.08	1.27	419209.69	573930.38	N 32 9 8.79	W 104 13 40.86
	6123.85	0.62	175.00	6122.38	-107.60	-107.91	11.48	1.04	419209.10	573929.78	N 32 9 8.79	W 104 13 40.87
	6220.78	1.01	134.00	6219.30	-108.70	-109.02	12.14	0.70	419207.99	573930.44	N 32 9 8.77	W 104 13 40.86
	6313.80	1.49	147.32	6312.30	-110.26	-110.61	13.38	0.60	419206.40	573931.68	N 32 9 8.76	W 104 13 40.84
	6408.01	1.49	151.23	6406.48	-112.33	-112.72	14.63	0.11	419204.29	573932.93	N 32 9 8.74	W 104 13 40.83

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 ° ' ")
	6503.72	1.32	158.61	6502.16	-114.43	-114.83	15.63	0.26	419202.18	573933.93	N 32 9 8.72	W 104 13 40.82
	6664.00	0.83	133.23	6662.41	-116.90	-117.35	17.15	0.42	419199.66	573935.45	N 32 9 8.69	W 104 13 40.80
	6698.00	0.88	130.42	6696.40	-117.23	-117.69	17.53	0.19	419199.33	573935.83	N 32 9 8.69	W 104 13 40.80
	6729.00	2.95	136.73	6727.39	-117.95	-118.42	18.26	6.70	419198.59	573936.56	N 32 9 8.68	W 104 13 40.79
	6759.00	6.29	140.78	6757.28	-119.75	-120.26	19.83	11.18	419196.75	573938.13	N 32 9 8.66	W 104 13 40.77
	6792.00	8.65	144.66	6790.00	-123.11	-123.68	22.41	7.31	419193.33	573940.70	N 32 9 8.63	W 104 13 40.74
	6825.00	6.82	136.09	6822.70	-126.48	-127.12	25.20	6.54	419189.89	573943.50	N 32 9 8.60	W 104 13 40.71
	6856.00	2.22	101.20	6853.60	-127.88	-128.56	27.07	16.64	419188.45	573945.37	N 32 9 8.58	W 104 13 40.68
	6889.00	3.79	351.69	6886.57	-126.91	-127.61	27.54	15.12	419189.41	573945.84	N 32 9 8.59	W 104 13 40.68
	6920.00	7.38	346.86	6917.42	-123.97	-124.65	26.94	11.67	419192.36	573945.23	N 32 9 8.62	W 104 13 40.69
	6951.00	8.39	359.10	6948.13	-119.78	-120.45	26.45	6.30	419196.56	573944.75	N 32 9 8.66	W 104 13 40.69
	6985.00	9.46	14.07	6981.72	-114.58	-115.26	27.09	7.49	419201.75	573945.39	N 32 9 8.71	W 104 13 40.68
	7014.00	11.04	19.01	7010.26	-109.61	-110.32	28.57	6.23	419206.69	573946.87	N 32 9 8.76	W 104 13 40.67
	7045.00	13.79	19.10	7040.53	-103.26	-104.02	30.75	8.87	419212.99	573949.05	N 32 9 8.82	W 104 13 40.64
	7077.00	18.24	15.69	7071.28	-94.77	-95.59	33.35	14.21	419221.41	573951.65	N 32 9 8.91	W 104 13 40.61
	7108.00	21.98	10.56	7100.39	-84.34	-85.22	35.73	13.33	419231.79	573954.03	N 32 9 9.01	W 104 13 40.58
	7138.00	24.61	2.66	7127.95	-72.54	-73.45	37.05	13.60	419243.55	573955.35	N 32 9 9.13	W 104 13 40.57
	7169.00	27.33	356.36	7155.82	-59.00	-59.90	36.90	12.49	419257.11	573955.19	N 32 9 9.26	W 104 13 40.57
	7201.00	30.63	351.64	7183.81	-43.64	-44.49	35.24	12.54	419272.51	573953.54	N 32 9 9.41	W 104 13 40.59
	7230.00	34.54	352.75	7208.24	-28.22	-29.02	33.13	13.64	419287.98	573951.43	N 32 9 9.57	W 104 13 40.61
	7264.00	38.78	353.81	7235.51	-8.13	-8.87	30.77	12.61	419308.13	573949.06	N 32 9 9.77	W 104 13 40.64
	7312.00	45.46	355.47	7271.10	23.83	23.17	27.79	14.11	419340.16	573946.09	N 32 9 10.08	W 104 13 40.67
	7349.00	51.75	355.73	7295.55	51.43	50.83	25.67	17.01	419367.82	573943.96	N 32 9 10.36	W 104 13 40.70
	7380.00	55.30	358.95	7313.98	76.29	75.72	24.52	14.17	419392.71	573942.82	N 32 9 10.60	W 104 13 40.71
	7407.00	56.55	0.99	7329.11	98.64	98.08	24.52	7.78	419415.07	573942.81	N 32 9 10.82	W 104 13 40.71
	7443.00	59.24	1.10	7348.24	129.13	128.57	25.07	7.48	419445.56	573943.37	N 32 9 11.13	W 104 13 40.71
	7475.00	63.46	1.91	7363.58	157.21	156.63	25.81	13.37	419473.62	573944.11	N 32 9 11.40	W 104 13 40.70
	7503.00	68.16	2.33	7375.05	182.74	182.15	26.76	16.84	419499.13	573945.06	N 32 9 11.66	W 104 13 40.68
	7538.00	75.77	3.14	7385.88	215.99	215.37	28.35	21.85	419532.35	573946.65	N 32 9 11.98	W 104 13 40.67
	7567.00	82.16	4.09	7391.43	244.41	243.76	30.15	22.27	419560.74	573948.45	N 32 9 12.27	W 104 13 40.64
	7600.00	88.80	4.56	7394.03	277.25	276.55	32.63	20.17	419593.52	573950.93	N 32 9 12.59	W 104 13 40.62
	7631.00	93.79	4.55	7393.32	308.18	307.43	35.09	16.10	419624.40	573953.39	N 32 9 12.90	W 104 13 40.59
	7694.00	95.96	5.15	7387.97	370.84	369.97	40.40	3.57	419686.94	573958.69	N 32 9 13.51	W 104 13 40.52
	7789.00	91.99	5.42	7381.39	465.37	464.32	49.12	4.19	419781.28	573967.42	N 32 9 14.45	W 104 13 40.42
	7882.00	91.38	4.27	7378.65	558.15	556.95	56.97	1.40	419873.90	573975.27	N 32 9 15.36	W 104 13 40.33
	7977.00	91.37	1.89	7376.37	653.08	651.78	62.08	2.50	419968.72	573980.37	N 32 9 16.30	W 104 13 40.27
	8072.00	91.31	0.06	7374.15	748.05	746.73	63.69	1.93	420063.66	573981.99	N 32 9 17.24	W 104 13 40.25
	8165.00	93.24	0.36	7370.46	840.95	839.65	64.03	2.10	420156.58	573982.33	N 32 9 18.16	W 104 13 40.24
	8260.00	93.51	1.60	7364.87	935.78	934.47	65.66	1.33	420251.39	573983.95	N 32 9 19.10	W 104 13 40.22
	8355.00	91.10	3.22	7361.05	1030.68	1029.30	69.65	3.06	420346.21	573987.94	N 32 9 20.04	W 104 13 40.18
	8450.00	92.30	4.65	7358.23	1125.54	1124.03	76.16	1.96	420440.93	573994.46	N 32 9 20.98	W 104 13 40.10
	8545.00	93.10	3.74	7353.75	1220.31	1218.67	83.11	1.27	420535.56	574001.40	N 32 9 21.91	W 104 13 40.02
	8644.00	92.93	3.31	7348.54	1319.11	1317.35	89.18	0.47	420634.23	574007.48	N 32 9 22.89	W 104 13 39.95
	8740.00	93.10	2.13	7343.50	1414.95	1413.10	93.73	1.24	420729.97	574012.02	N 32 9 23.84	W 104 13 39.89
	8835.00	93.75	2.06	7337.82	1509.77	1507.87	97.20	0.69	420824.73	574015.49	N 32 9 24.77	W 104 13 39.85
	8931.00	94.06	0.11	7331.28	1605.54	1603.63	99.01	2.05	420920.48	574017.30	N 32 9 25.72	W 104 13 39.83
	9022.00	92.41	359.55	7326.15	1696.36	1694.48	98.74	1.91	421011.32	574017.03	N 32 9 26.62	W 104 13 39.83
	9117.00	88.14	359.14	7325.69	1791.28	1789.45	97.66	4.52	421106.28	574015.95	N 32 9 27.56	W 104 13 39.84
	9212.00	88.25	358.86	7328.68	1886.15	1884.39	96.00	0.32	421201.21	574014.29	N 32 9 28.50	W 104 13 39.86
	9306.00	88.32	358.33	7331.50	1979.99	1978.32	93.70	0.57	421295.13	574011.99	N 32 9 29.43	W 104 13 39.89
	9401.00	88.28	357.04	7334.31	2074.75	2073.19	89.86	1.36	421390.00	574008.15	N 32 9 30.37	W 104 13 39.93
	9496.00	88.32	356.27	7337.13	2169.39	2167.99	84.32	0.81	421484.79	574002.61	N 32 9 31.31	W 104 13 39.99
	9591.00	88.28	356.82	7339.95	2264.01	2262.77	78.60	0.58	421579.57	573996.89	N 32 9 32.24	W 104 13 40.06
	9686.00	88.25	358.64	7342.83	2358.77	2357.65	74.84	1.92	421674.44	573993.13	N 32 9 33.18	W 104 13 40.10
	9780.00	88.42	0.25	7345.56	2452.67	2451.61	73.93	1.72	421768.38	573992.22	N 32 9 34.11	W 104 13 40.11
	9875.00	88.42	0.81	7348.18	2547.63	2546.57	74.81	0.59	421863.33	573993.10	N 32 9 35.05	W 104 13 40.10
	9970.00	88.49	1.59	7350.74	2642.59	2641.51	76.79	0.82	421958.27	573995.09	N 32 9 35.99	W 104 13 40.07
	10064.00	89.21	2.01	7352.63	2736.57	2735.44	79.75	0.89	422052.19	573998.04	N 32 9 36.92	W 104 13 40.04
	10155.00	89.07	2.10	7353.99	2827.55	2826.37	83.01	0.18	422143.11	574001.30	N 32 9 37.82	W 104 13 40.00
	10250.00	89.14	2.76	7355.48	2922.52	2921.28	87.04	0.70	422238.01	574005.33	N 32 9 38.76	W 104 13 39.95
	10349.00	90.62	3.72	7355.68	3021.47	3020.11	92.63	1.78	422336.84	574010.92	N 32 9 39.74	W 104 13 39.89
	10443.00	91.96	3.08	7353.57	3115.38	3113.92	98.21	1.58	422430.64	574016.50	N 32 9 40.67	W 104 13 39.82
	10537.00	91.69	1.73	7350.57	3209.32	3207.79	102.15	1.46	422524.50	574020.44	N 32 9 41.59	W 104 13 39.77
	10632.00	90.86	1.14	7348.46	3304.29	3302.74	104.53	1.07	422619.43	574022.82	N 32 9 42.53	W 104 13 39.74
	10727.00	90.72	0.59	7347.15	3399.28	3397.71	105.96	0.60	422714.40	574024.25	N 32 9 43.47	W 104 13 39.73
	10821.00	91.55	359.86	7345.29	3493.24	3491.69	106.33	1.18	422808.37	574024.62	N 32 9 44.40	W 104 13 39.72
	10916.00	91.38	359.98	7342.86	3588.18	3586.66	106.20	0.22	422903.33	574024.49	N 32 9 45.34	W 104 13 39.72
	11010.00	91.48	359.54	7340.51	3682.11	3680.63	105.80	0.48	422997.30	574024.09	N 32 9 46.27	W 104 13 39.73
	11105.00	91.20	358.82	7338.29	3777.02	3775.60	104.44	0.81	423092.25	574022.73	N 32 9 47.21	W 104 13 39.74
	11199.00	91.14	356.25	7336.37	3870.78	3869.48	100.40	2.73	423186.13	574018.69	N 32 9 48.14	W 104 13 39.79
	11293.00	91.44	355.96	7334.26	3964.36	3963.24	94.02	0.44	423279.88	574012.31	N 32 9 49.07	W 104 13 39.86
	11385.00	91.37	355.92	7332.00	4055.91	4054.98	87.51	0.09	423371.61	574005.80	N 32 9 49.98	W 104 13 39.93
	11479.00	91.58	356.72	7329.58	4149.52	4148.76	81.48	0.88	423465.38	573999.77	N 32 9 50.91	W 104 13 40.00
	11575.00	91.58	357.59	7326.93	4245.22	4244.60	76.71	0.91	423561.21	573995.01	N 32 9 51.85	W 104 13 40.06
	11671.00	91.44	359.67	7324.40	4341.07	4340.53	74.42	2.17	423657.14	573992.71	N 32 9 52.80	W 104 13 40.08
	11763.00	91.10	1.36	7322.36	4433.03	4432.50	75.24	1.87	423749.10	573993.54	N 32 9 53.71	W 104 13 40.07
	11858.00	91.38	3.26	7320.31	4528.00	4527.40	79.07	2.02	423843.99	573997.37	N 32 9 54.65	W 104 13 40.03
Final Survey	11870.00	91.27	3.32	7320.03	4539.99	4539.38	79.76	1.04	423855.98	573998.05	N 32 9 54.77	W 104 13 40.02
Proj to TD	11940.00	91.27	3.32	7318.48	4609.93	4609.24	83.81	0.00	423925.82	574002.11	N 32 9 55.46	W 104 13 39.97

Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	18.000	Act Stns	30.000	30.000	SLB_MWD-POOR-Depth Only	Original Borehole / Cimarex Scoter 6 Federal #3H

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 ° ' ")
		18.000	1661.000		Act Stns	30.000	30.000	SLB_MWD-POOR		Original Borehole / Cimarex Scoter 6 Federal #3H		
		1661.000	1987.000		1/98.425	30.000	30.000	SLB_MWD-POOR		Original Borehole / Cimarex Scoter 6 Federal #3H		
		1987.000	6503.720		Act Stns	30.000	30.000	SLB_MWD-POOR		Original Borehole / Cimarex Scoter 6 Federal #3H		
		6503.720	11870.000		Act Stns	30.000	30.000	SLB_MWD-STD		Original Borehole / Cimarex Scoter 6 Federal #3H		
		11870.000	11940.000		Act Stns	30.000	30.000	SLB_BLIND+TREND		Original Borehole / Cimarex Scoter 6 Federal #3H		