

Results of Directional Survey

DD

API number:	30-025-40906			
OGRID:		Operator:	CIMAREX ENERGY CO.	
		Property:	CHIEF 30 STATE	# 5

surface	ULSTR:	M	30	T	20S	R	35E
				760	FSL	530	FWL

BH Loc	ULSTR:	M	30	T	20S	R	35E
11405	MD	11395.1	TVD	727	FSL	343	FWL

Top Perf/OH	ULSTR:	M	30	T	20S	R	35E
11145	MD	11135.1	TVD	727	FSL	345	FWL

Bot Perf/OH	ULSTR:	M	30	T	20S	R	35E
11345	MD	11335.1	TVD	727	FSL	344	FWL

	MD	N/S	E/W	VD
	11135.11	-33.33	-184.77	11125.21
TOP PERFS/OH	11145	-33.31	-184.82	11135.10
	11229.3	-33.10	-185.24	11219.40
	11323.5	-32.73	-186.13	11313.58
BOT PERFS/OH	11345	-32.70	-186.43	11335.09
	11405	-32.63	-187.25	11395.09

NEXT TO LAST	11323.5	-32.73	-186.13	11313.58
LAST READING	11405	-32.63	-187.25	11395.09
TD	11405	-32.63	-187.25	11395.09

Surface Location	760	FS	530	FW
Projected BHL	727	FS	343	FW
Location of				
Top Perfs/OH	727	FS	345	FW
Bottom Perfs/OH	727	FS	344	FW

SUMMARY of Subsurface Locations

Surface Location	M-30-20S-35E	760	FS	530	FW	Vert. Depth
Top Perfs/OH	M-30-20S-35E	727	FS	345	FW	11135.10
Bottom Perfs/OH	M-30-20S-35E	727	FS	344	FW	11335.09
Projected TD	M-30-20S-35E	727	FS	343	FW	11395.09

AUG 29 2013



PO Box 1370
Artesia, NM 88211-1370
(575) 748-1288

March 1, 2013

Cimarex Energy Co.
600 N. Marienfeld, Suite 600
Midland, TX 79701

RE: Chief 30 State #5
760' FSL & 530' FWL
Sec. 30, T20S, R35E
Lea County, New Mexico

Dear Sir,

The attached is the Deviation Survey for the above captioned well.

Very truly yours,

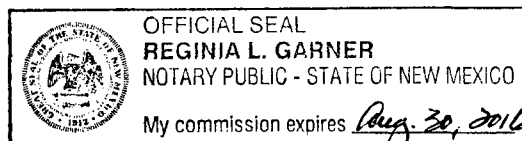
A handwritten signature in cursive script that reads "Graham".

Chris Graham
Drilling Superintendent

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 1st day of March, 2013.

A handwritten signature in cursive script that reads "Regina L. Garner".

Notary Public

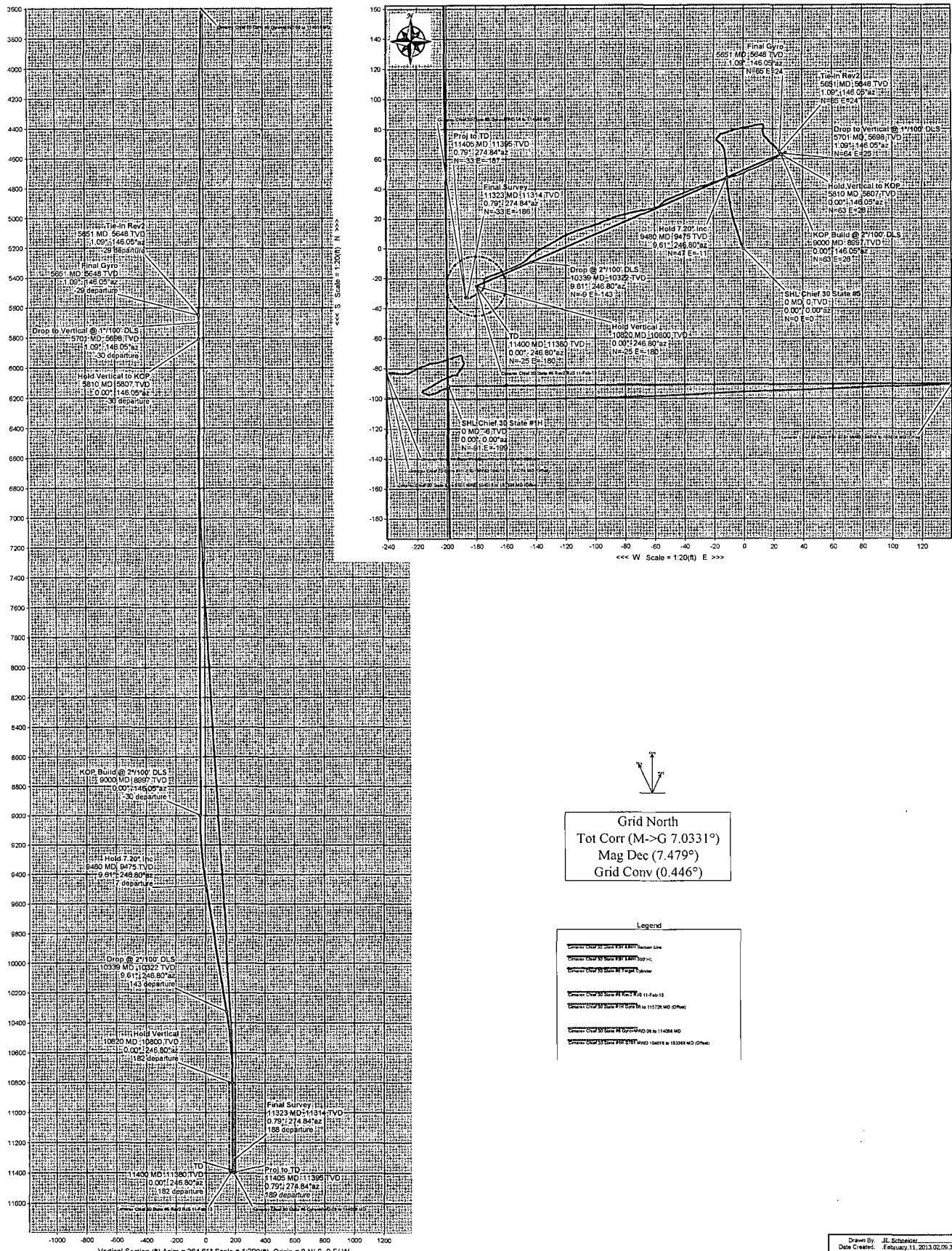
CHIEF 30 STATE 5

Depth	Dev/Incl	Dir/Azm	TVD
218.00	0.60	0.00	0.00
461.00	0.60	0.00	0.00
700.00	1.50	0.00	0.00
761.00	1.30	0.00	0.00
1010.00	4.80	0.00	0.00
1073.00	5.80	0.00	0.00
1104.00	5.90	0.00	0.00
1134.00	5.70	0.00	0.00
1165.00	6.20	0.00	0.00
1196.00	6.20	0.00	0.00
1228.00	5.70	0.00	0.00
1260.00	4.20	0.00	0.00
1292.00	3.80	0.00	0.00
1384.00	3.00	0.00	0.00
1447.00	2.00	0.00	0.00
1480.00	2.20	0.00	0.00
1573.00	1.60	0.00	0.00
1730.00	1.00	0.00	0.00
1898.00	1.00	0.00	0.00
2190.00	0.04	0.00	0.00
2345.00	0.20	0.00	0.00
2566.00	0.20	0.00	0.00
2788.00	0.20	0.00	0.00
2946.00	0.30	0.00	0.00
3040.00	0.40	0.00	0.00
3135.00	1.00	0.00	0.00
3197.00	1.60	0.00	0.00
3261.00	1.70	0.00	0.00
3355.00	1.80	0.00	0.00
3449.00	0.90	0.00	0.00
3480.00	1.70	0.00	0.00
3575.00	2.40	0.00	0.00
3638.00	1.50	0.00	0.00
3733.00	1.40	0.00	0.00
3827.00	1.10	0.00	0.00
3954.00	0.90	0.00	0.00
4016.00	0.40	0.00	0.00
4174.00	1.80	0.00	0.00
4274.00	0.80	0.00	0.00
4364.00	0.60	0.00	0.00
4586.00	0.80	0.00	0.00
4775.00	1.80	0.00	0.00
4869.00	0.90	0.00	0.00

Depth	Dev/Incl	Dir/Azm	TVD
5027.00	1.30	0.00	0.00
5184.00	1.50	0.00	0.00
5279.00	0.01	0.00	0.00
5405.00	1.70	0.00	0.00
5499.00	1.40	0.00	0.00
5625.00	1.40	0.00	0.00
5697.80	0.88	41.93	5697.58
5764.86	0.70	149.51	5764.63
5827.73	0.70	147.31	5827.50
5858.07	0.40	123.45	5857.84
5915.06	0.48	48.92	5914.82
5958.80	0.48	45.45	5958.56
6047.38	0.48	54.02	6047.14
6138.55	0.48	54.72	6138.31
6233.30	0.31	60.04	6233.05
6327.73	0.40	40.74	6327.48
6421.72	0.09	266.23	6421.47
6515.49	0.31	251.64	6515.24
6611.35	0.48	253.92	6611.10
6705.65	1.58	241.75	6705.38
6895.67	1.49	234.63	6895.33
6995.97	2.50	241.93	6995.57
7069.49	2.50	240.83	7069.02
7184.25	3.21	247.73	7183.64
7278.68	3.52	250.32	7277.91
7367.10	3.52	249.84	7366.16
7462.11	3.52	252.12	7460.99
7555.06	3.52	253.04	7553.77
7649.74	3.52	253.44	7648.27
7744.75	3.38	251.24	7743.11
7840.78	3.12	254.32	7838.98
7934.52	3.21	250.85	7932.58
8029.14	3.21	247.64	8027.05
8123.13	2.99	251.81	8120.90
8186.49	3.12	244.91	8184.17
8223.72	2.99	247.55	8221.35
8319.20	3.38	248.91	8316.68
8411.39	3.78	222.72	8408.70
8500.86	3.52	257.92	8498.00
8594.16	3.60	258.14	8591.12
8688.03	3.69	258.32	8684.80
8782.65	3.60	256.52	8779.23
8880.78	3.38	257.22	8877.17
8975.95	3.91	247.81	8972.15
9071.30	3.78	247.02	9067.29

Depth	Dev/Incl	Dir/Azm	TVD
9164.18	3.91	250.93	9159.96
9254.20	3.52	254.71	9249.79
9254.86	3.52	254.85	9250.45
9348.49	4.09	249.04	9343.87
9442.85	3.69	248.43	9438.01
9538.09	3.91	238.23	9533.05
9632.71	4.31	242.23	9627.42
9724.58	4.31	242.94	9719.03
9820.87	3.21	233.84	9815.11
9915.72	2.50	223.82	9909.85
10010.24	2.81	233.22	10004.27
10104.99	3.30	244.65	10098.88
10199.38	3.38	249.31	10193.11
10292.75	3.52	250.71	10286.31
10387.08	3.21	250.93	10380.48
10476.87	2.90	251.02	10470.14
10570.48	1.49	197.15	10563.69
10666.05	2.29	173.15	10659.21
10758.99	1.32	212.92	10752.10
10853.35	1.89	230.85	10846.43
10952.07	2.59	243.42	10945.07
11041.97	1.80	234.72	11034.90

EOF





Cimarex Chief 30 State #5 Gyro+MWD 0ft to 11405ft MD (Def Survey)

Report Date: February 27, 2013 - 06:37 AM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: Silver Oak 3 / Cimarex Chief 30 State #5
Well: Cimarex Chief 30 State #5
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Chief 30 State #5 Gyro+MWD 0ft to 11405ft MD
Survey Date: January 09, 2013
Tort / AHD / DDI / ERD Ratio: 56.464 ° / 383.759 ft / 4.336 / 0.034
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 32' 20.09941", W 103° 30' 12.41731"
Location Grid N/E Y/X: N 560784.750 ftUS, E 797079.390 ftUS
CRS Grid Convergence Angle: 0.4464 °
Grid Scale Factor: 0.99998399

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 264.605 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3769.500 ft above MSL
Seabed / Ground Elevation: 3751.000 ft above MSL
Magnetic Declination: 7.479 °
Total Gravity Field Strength: 998.4797mgn (9.80665 Based)
Total Magnetic Field Strength: 48628.741 nT
Magnetic Dip Angle: 60.413 °
Declination Date: February 08, 2013
Magnetic Declination Model: BGGM 2012
North Reference: Grid North
Grid Convergence Used: 0.4464 °
Total Corr Mag North->Grid North: 7.0321 °

Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	TF (°)
SHL Chief 30 State #5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	344.16M
	100.00	0.47	344.16	100.00	0.07	0.39	-0.11	0.41	344.16	0.47	325.69M
	200.00	0.41	325.69	200.00	0.32	1.08	-0.43	1.17	338.58	0.15	331.27M
	300.00	0.55	331.27	299.99	0.68	1.80	-0.86	1.99	334.53	0.15	341.04M
	400.00	0.84	341.04	399.99	1.05	2.92	-1.33	3.20	335.53	0.31	341.54M
	500.00	0.85	341.54	499.97	1.39	4.31	-1.80	4.67	337.34	0.01	346.15M
	600.00	1.17	346.15	599.96	1.70	6.01	-2.28	6.42	339.22	0.33	344.12M
	700.00	1.87	344.12	699.92	2.15	8.57	-2.97	9.07	340.88	0.70	340.85M
	826.70	2.76	340.85	826.52	3.25	13.44	-4.54	14.18	341.35	0.71	343.48M
	921.30	3.62	343.48	920.97	4.37	18.45	-6.13	19.44	341.62	0.92	348.55M
	1015.90	5.15	348.55	1015.29	5.39	25.48	-7.82	26.65	342.93	1.67	352.07M
	1110.50	6.45	352.07	1109.41	6.08	34.90	-9.40	36.15	344.93	1.42	354.31M
	1205.00	5.78	354.31	1203.37	6.34	44.89	-10.60	46.13	346.71	0.75	356.3M
	1299.60	4.37	356.30	1297.59	6.25	53.23	-11.31	54.42	348.00	1.50	354.14M
	1394.20	2.94	354.14	1392.00	6.17	59.24	-11.79	60.40	348.74	1.52	352.28M
	1488.80	2.18	352.28	1486.50	6.26	63.44	-12.28	64.62	349.04	0.81	344.39M
	1583.40	1.43	344.39	1581.06	6.54	66.36	-12.84	67.59	349.05	0.83	325.55M
	1678.00	1.27	325.55	1675.63	7.26	68.36	-13.75	69.73	348.63	0.50	312.75M
	1772.60	1.25	312.75	1770.21	8.46	69.92	-15.10	71.54	347.81	0.30	309.71M
	1867.20	1.30	309.71	1864.78	9.90	71.31	-16.68	73.24	346.83	0.09	307.73M

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	TF (°)
	1961.80	0.67	307.73	1959.37	11.07	72.33	-17.95	74.53	346.07	0.67	34.49M
	2056.30	0.76	34.49	2053.87	11.07	73.19	-18.03	75.38	346.16	1.04	39.74M
	2150.90	0.66	39.74	2148.46	10.28	74.12	-17.33	76.12	346.84	0.13	41.98M
	2245.50	0.60	41.98	2243.05	9.53	74.91	-16.65	76.74	347.47	0.07	49.01M
	2340.10	0.54	49.01	2337.65	8.80	75.57	-15.98	77.24	348.06	0.10	34.51M
	2434.70	0.25	34.51	2432.25	8.31	76.04	-15.52	77.60	348.46	0.32	1.88M
	2529.30	0.21	1.88	2526.84	8.15	76.38	-15.40	77.92	348.60	0.14	337.75M
	2623.90	0.18	337.75	2621.44	8.17	76.69	-15.45	78.23	348.61	0.09	107.32M
	2718.50	0.14	107.32	2716.04	8.11	76.79	-15.40	78.32	348.66	0.31	104.03M
	2813.10	0.18	104.03	2810.64	7.86	76.72	-15.14	78.20	348.83	0.04	92.6M
	2907.70	0.30	92.60	2905.24	7.48	76.67	-14.75	78.08	349.11	0.14	77.32M
	3002.30	0.54	77.32	2999.84	6.79	76.76	-14.07	78.04	349.61	0.28	75.07M
	3096.80	1.09	75.07	3094.33	5.46	77.09	-12.77	78.14	350.60	0.58	67.12M
	3191.40	1.58	67.12	3188.90	3.33	77.83	-10.70	78.56	352.18	0.55	71.3M
	3286.00	1.62	71.30	3283.47	0.79	78.77	-8.23	79.19	354.04	0.13	79.17M
	3380.60	1.61	79.17	3378.03	-1.84	79.44	-5.66	79.64	355.93	0.23	76.92M
	3475.20	1.81	76.92	3472.59	-4.64	80.03	-2.90	80.08	357.93	0.22	78.67M
	3569.80	2.07	78.67	3567.13	-7.82	80.71	0.24	80.71	0.17	0.28	80.26M
	3664.40	1.60	80.26	3661.68	-10.84	81.26	3.21	81.33	2.26	0.50	76.69M
	3759.00	1.28	76.69	3756.25	-13.20	81.73	5.54	81.92	3.88	0.35	78.01M
	3853.60	1.47	78.01	3850.83	-15.45	82.23	7.76	82.59	5.39	0.20	79.6M
	3948.20	1.07	79.60	3945.40	-17.54	82.64	9.81	83.22	6.77	0.42	85.09M
	4042.70	1.02	85.09	4039.89	-19.26	82.87	11.52	83.67	7.91	0.12	89.48M
	4137.30	0.68	89.48	4134.48	-20.66	82.95	12.92	83.95	8.85	0.37	161.43M
	4231.90	0.43	161.43	4229.07	-21.30	82.61	13.59	83.73	9.34	0.72	160.33M
	4326.50	0.48	160.33	4323.67	-21.48	81.91	13.84	83.07	9.59	0.05	180.13M
	4421.10	0.66	180.13	4418.27	-21.52	80.99	13.97	82.18	9.79	0.28	213.23M
	4515.70	0.62	213.23	4512.86	-21.15	80.01	13.69	81.18	9.71	0.39	204.25M
	4610.30	0.54	204.25	4607.46	-20.61	79.18	13.23	80.28	9.48	0.13	162.95M
	4704.90	0.66	162.95	4702.05	-20.50	78.25	13.20	79.36	9.58	0.46	163.59M
	4799.50	0.82	163.59	4796.64	-20.74	77.08	13.55	78.26	9.97	0.17	157.44M
	4894.10	0.51	157.44	4891.24	-21.00	76.04	13.91	77.31	10.36	0.34	144.77M
	4988.60	0.79	144.77	4985.73	-21.44	75.12	14.44	76.50	10.88	0.33	129.63M
	5083.20	1.05	129.63	5080.32	-22.38	74.04	15.49	75.64	11.82	0.37	147.06M
	5177.80	1.32	147.06	5174.90	-23.50	72.57	16.75	74.48	13.00	0.47	125.84M
	5272.40	1.53	125.84	5269.47	-24.95	70.92	18.36	73.26	14.52	0.60	132.81M
	5367.00	1.53	132.81	5364.04	-26.74	69.32	20.31	72.23	16.33	0.20	135.36M
	5461.60	1.30	135.36	5458.61	-28.26	67.70	22.00	71.18	18.00	0.25	138.91M
	5556.20	1.13	138.91	5553.19	-29.49	66.23	23.36	70.23	19.43	0.20	146.05M
Final Gyro	5650.80	1.09	146.05	5647.77	-30.46	64.78	24.48	69.25	20.70	0.15	123.45M
	5858.07	0.40	123.45	5855.02	-31.97	62.75	26.18	67.99	22.65	0.36	45.45M
	5958.79	0.48	45.45	5955.74	-32.57	62.85	26.78	68.32	23.08	0.55	54.02M
	6047.38	0.48	54.02	6044.32	-33.17	63.33	27.34	68.98	23.35	0.08	54.72M
	6138.55	0.48	54.72	6135.49	-33.83	63.77	27.96	69.63	23.68	0.01	60.04M

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	TF (°)
	6233.30	0.31	60.04	6230.24	-34.41	64.13	28.51	70.18	23.97	0.18	40.74M
	6327.73	0.40	40.74	6324.67	-34.88	64.51	28.94	70.70	24.17	0.16	266.23M
	6421.72	0.09	266.23	6418.66	-35.04	64.75	29.09	70.98	24.19	0.50	251.64M
	6515.31	0.31	251.64	6512.25	-34.72	64.67	28.77	70.78	23.99	0.24	253.92M
	6611.35	0.48	253.92	6608.28	-34.08	64.47	28.14	70.35	23.58	0.18	241.75M
	6705.65	1.58	241.75	6702.57	-32.49	63.75	26.61	69.08	22.66	1.18	236.21M
	6800.00	1.58	236.21	6796.88	-30.15	62.41	24.39	67.00	21.34	0.16	234.63M
	6895.67	1.49	234.63	6892.52	-27.91	60.96	22.28	64.90	20.07	0.10	241.93M
	6995.97	2.50	241.93	6992.76	-24.76	59.17	19.28	62.23	18.05	1.04	240.83M
	7069.49	2.50	240.83	7066.21	-21.81	57.64	16.47	59.94	15.95	0.07	247.7M
	7184.25	3.21	247.70	7180.82	-16.45	55.20	11.31	56.34	11.58	0.69	250.32M
	7278.68	3.52	250.32	7275.09	-11.11	53.22	6.13	53.57	6.57	0.37	243.84M
	7367.10	3.52	243.84	7363.34	-5.94	51.11	1.14	51.12	1.28	0.45	252.12M
	7462.11	3.52	252.12	7458.17	-0.37	48.92	-4.25	49.11	355.03	0.53	253.04M
	7555.06	3.52	253.04	7550.95	5.21	47.22	-9.70	48.20	348.39	0.06	253.44M
	7649.74	3.52	253.44	7645.45	10.91	45.54	-15.26	48.03	341.47	0.03	251.24M
	7744.75	3.38	251.24	7740.29	16.50	43.81	-20.71	48.46	334.70	0.20	254.32M
	7840.78	3.12	254.32	7836.16	21.83	42.19	-25.91	49.51	328.45	0.33	250.85M
	7934.52	3.21	250.85	7929.76	26.89	40.64	-30.84	51.02	322.80	0.23	247.64M
	8029.14	3.21	247.64	8024.23	31.99	38.76	-35.80	52.76	317.28	0.19	251.81M
	8123.13	2.99	251.81	8118.09	36.90	37.00	-40.56	54.90	312.37	0.34	247.55M
	8223.72	2.99	247.55	8218.54	41.97	35.18	-45.47	57.49	307.72	0.22	248.91M
	8319.20	3.38	248.91	8313.87	47.06	33.21	-50.40	60.36	303.38	0.42	222.72M
	8411.39	3.78	222.72	8405.89	51.94	30.00	-55.00	62.65	298.61	1.81	257.92M
	8500.86	3.52	257.92	8495.19	56.86	27.26	-59.69	65.62	294.55	2.48	258.14M
	8594.16	3.60	258.14	8588.31	62.61	26.06	-65.35	70.36	291.74	0.09	258.32M
	8688.03	3.69	258.32	8681.99	68.55	24.84	-71.20	75.41	289.23	0.10	256.52M
	8782.65	3.60	256.52	8776.41	74.51	23.53	-77.07	80.58	286.98	0.15	257.22M
	8880.78	3.38	257.22	8874.36	80.43	22.17	-82.88	85.80	284.98	0.23	247.81M
	8975.95	3.91	247.81	8969.34	86.32	20.33	-88.62	90.93	282.92	0.84	247.02M
	9071.30	3.78	247.02	9064.48	92.43	17.87	-94.53	96.20	280.71	0.15	250.93M
	9164.18	3.91	250.93	9157.15	98.42	15.64	-100.34	101.55	278.86	0.32	254.71M
	9254.20	3.52	254.71	9246.98	104.13	13.91	-105.91	106.82	277.48	0.51	249.04M
	9348.49	4.09	249.04	9341.06	110.22	11.95	-111.84	112.48	276.10	0.72	248.43M
	9442.85	3.69	248.43	9435.20	116.38	9.63	-117.81	118.20	274.67	0.43	238.23M
	9538.09	3.91	238.23	9530.23	122.23	6.79	-123.42	123.60	273.15	0.75	242.23M
	9632.71	4.31	242.23	9624.61	128.41	3.43	-129.30	129.35	271.52	0.52	242.94M
	9724.58	4.31	242.94	9716.22	134.81	0.26	-135.43	135.43	270.11	0.06	233.84M
	9820.87	3.21	233.84	9812.30	140.49	-2.98	-140.83	140.86	268.79	1.30	223.82M
	9915.72	2.50	223.82	9907.04	144.34	-6.04	-144.41	144.54	267.60	0.91	233.22M
	10010.24	2.81	233.22	10001.45	147.88	-8.92	-147.69	147.96	266.55	0.56	244.65M
	10104.99	3.30	244.65	10096.07	152.42	-11.47	-152.02	152.45	265.68	0.82	249.31M
	10199.38	3.38	249.31	10190.30	157.66	-13.62	-157.07	157.66	265.04	0.30	250.71M
	10292.75	3.52	250.71	10283.50	163.10	-15.54	-162.36	163.10	264.53	0.17	250.93M

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	TF (°)
	10387.08	3.21	250.93	10377.67	168.47	-17.36	-167.58	168.48	264.09	0.33	251.02M
	10476.87	2.90	251.02	10467.33	173.12	-18.92	-172.11	173.15	263.73	0.35	197.15M
	10570.48	1.49	197.15	10560.88	175.89	-20.85	-174.71	175.95	263.19	2.51	173.15M
	10666.05	2.29	173.15	10656.40	176.32	-23.94	-174.85	176.48	262.20	1.16	212.92M
	10758.99	1.32	212.92	10749.29	176.94	-26.68	-175.21	177.23	261.34	1.65	230.85M
	10853.35	1.89	230.85	10843.62	178.91	-28.57	-177.00	179.29	260.83	0.80	243.42M
	10952.07	2.59	243.42	10942.26	182.34	-30.60	-180.26	182.84	260.37	0.86	234.41M
	11048.69	1.80	234.41	11038.81	185.69	-32.46	-183.45	186.30	259.97	0.89	250.01M
	11135.11	0.31	250.01	11125.21	187.09	-33.33	-184.77	187.75	259.78	1.74	323.53M
	11229.30	0.48	323.53	11219.40	187.54	-33.10	-185.24	188.18	259.87	0.52	274.84M
Final Survey	11323.49	0.79	274.84	11313.58	188.38	-32.73	-186.13	188.98	260.03	0.63	274.84M
Proj to TD	11405.00	0.79	274.84	11395.09	189.48	-32.63	-187.25	190.07	260.11	0.00	

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	18.500	Act Stns	30.000	30.000	SLB_NSG+MSHOT-Depth Only	Original Borehole / Cimarex Chief 30 State #5 Gyro+MWD 0ft to 11405ft MD
	18.500	5650.800	Act Stns	30.000	30.000	SLB_NSG+MSHOT	Original Borehole / Cimarex Chief 30 State #5 Gyro+MWD 0ft to
	5650.800	11323.490	Act Stns	30.000	30.000	SLB_MWD-POOR	Original Borehole / Cimarex Chief 30 State #5 Gyro+MWD 0ft to
	11323.490	11405.000	Act Stns	30.000	30.000	SLB_BLIND+TREND	Original Borehole / Cimarex Chief 30 State #5 Gyro+MWD 0ft to