

Results of Directional Survey

API number:	30-025-41175		
OGRID:		Operator:	CIMAREX ENERGY CO.
		Property:	TRISTE DRAW 30 FEDERAL # 2H

surface	ULSTR:	N	30	T	23S	R	33E
				330	FSL	1980	FWL

BH Loc	ULSTR:	C	30	T	23S	R	33E
15562	MD	11076.2	TVD	339	FNL	1970	FWL
				4941	FSL		

Top Perf/OH	ULSTR:	N	30	T	23S	R	33E
10795	MD	10787.0	TVD	301	FSL	1887	FWL

Bot Perf/OH	ULSTR:	C	30	T	23S	R	33E
15530	MD	11075.6	TVD	371	FNL	1970	FWL
				4909	FSL		

	MD	N/S	E/W	VD
	10749	-47.69	-93.56	10744.88
TOP PERFS/OH	10795	-29.25	-92.67	10787.00
	10781	-34.86	-92.94	10774.18
	15489	4537.80	-9.70	11074.85
BOT PERFS/OH	15530	4578.79	-9.96	11075.61
	15562	4610.78	-10.17	11076.21

NEXT TO LAST	15489	4537.80	-9.70	11074.85
LAST READING	15562	4610.78	-10.17	11076.21
TD	15562	4610.78	-10.17	11076.21

Surface Location	330	FS	1980	FW
Projected BHL	4941	FS	1970	FW
Location of				
Top Perfs/OH	301	FS	1887	FW
Bottom Perfs/OH	4909	FS	1970	FW

SUMMARY of Subsurface Locations

Surface Location	N-30-23S-33E	330	FS	1980	FW	Vert. Depth
Top Perfs/OH	N-30-23S-33E	301	FS	1887	FW	10787.00
Bottom Perfs/OH	C-30-23S-33E	4909	FS	1970	FW	11075.61
Projected TD	C-30-23S-33E	4941	FS	1970	FW	11076.21

MAY 07 2014



Cimarex Triste Draw 30 Federal #2H MWD 0ft to 15562ft Survey Geodetic Report

(Def Survey)



Report Date: December 14, 2013 - 01:04 PM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: Cimarex Triste Draw 30 Federal #2H / Cimarex Triste Draw 30 Federal #2H
Well: Cimarex Triste Draw 30 Federal #2H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Triste Draw 30 Federal #2H MWD 0ft to 15562ft
Survey Date: November 15, 2013
Tort / AHD / DDI / ERD Ratio: 162.361 ° / 4847.639 ft / 6.043 / 0.437
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 16' 9.92700", W 103° 36' 47.96422"
Location Grid N/E Y/X: N 462496.100 ftUS, E 763879.400 ftUS
CRS Grid Convergence Angle: 0.3844 °
Grid Scale Factor: 0.99996581

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 359.536 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3716.000 ft above MSL
Seabed / Ground Elevation: 3696.000 ft above MSL
Magnetic Declination: 7.419 °
Total Gravity Field Strength: 998.4624mgn (9.80665 Based)
Total Magnetic Field Strength: 48380.492 nT
Magnetic Dip Angle: 60.149 °
Declination Date: November 15, 2013
Magnetic Declination Model: BGGM 2013
North Reference: Grid North
Grid Convergence Used: 0.3844 °
Total Corr Mag North->Grid North: 7.0346 °

Local Coord Referenced To: Structure Reference Point

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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	462496.10	763879.40	N 32 16 9.93	W 103 36 47.96
	141.00	0.00	176.43	141.00	0.00	0.00	0.00	0.00	462496.10	763879.40	N 32 16 9.93	W 103 36 47.96
	236.00	0.40	229.35	236.00	-0.21	-0.22	-0.25	0.42	462495.88	763879.15	N 32 16 9.92	W 103 36 47.97
	323.00	0.70	234.74	323.00	-0.71	-0.72	-0.92	0.35	462495.38	763878.48	N 32 16 9.92	W 103 36 47.97
	447.00	0.62	278.74	446.99	-1.04	-1.06	-2.20	0.40	462495.04	763877.20	N 32 16 9.92	W 103 36 47.99
	567.00	0.62	226.84	566.98	-1.37	-1.40	-3.31	0.45	462494.70	763876.09	N 32 16 9.91	W 103 36 48.00
	658.00	0.48	236.86	657.98	-1.91	-1.95	-3.99	0.19	462494.15	763875.41	N 32 16 9.91	W 103 36 48.01
	754.00	0.40	242.84	753.97	-2.28	-2.32	-4.63	0.10	462493.78	763874.77	N 32 16 9.90	W 103 36 48.02
	850.00	0.40	262.74	849.97	-2.47	-2.51	-5.26	0.14	462493.59	763874.14	N 32 16 9.90	W 103 36 48.03
	945.00	0.40	252.33	944.97	-2.61	-2.66	-5.90	0.08	462493.44	763873.50	N 32 16 9.90	W 103 36 48.03
	1040.00	0.22	250.13	1039.97	-2.77	-2.82	-6.39	0.19	462493.28	763873.01	N 32 16 9.90	W 103 36 48.04
	1135.48	0.48	225.83	1135.45	-3.11	-3.16	-6.85	0.31	462492.94	763872.55	N 32 16 9.90	W 103 36 48.04
	1231.00	0.31	213.74	1230.96	-3.60	-3.65	-7.28	0.20	462492.45	763872.12	N 32 16 9.89	W 103 36 48.05
	1263.00	0.22	316.93	1262.96	-3.62	-3.68	-7.37	1.31	462492.42	763872.03	N 32 16 9.89	W 103 36 48.05
	1422.00	0.22	274.74	1421.96	-3.37	-3.43	-7.88	0.10	462492.67	763871.52	N 32 16 9.89	W 103 36 48.06
	1518.00	0.40	255.14	1517.96	-3.44	-3.50	-8.39	0.21	462492.60	763871.01	N 32 16 9.89	W 103 36 48.06
	1613.00	0.48	258.74	1612.96	-3.59	-3.67	-9.10	0.09	462492.43	763870.30	N 32 16 9.89	W 103 36 48.07
	1707.00	0.48	278.74	1706.96	-3.60	-3.68	-9.88	0.18	462492.42	763869.53	N 32 16 9.89	W 103 36 48.08
	1803.00	0.48	283.05	1802.95	-3.45	-3.53	-10.66	0.04	462492.57	763868.74	N 32 16 9.89	W 103 36 48.09
	1898.00	0.48	296.67	1897.95	-3.17	-3.26	-11.41	0.12	462492.84	763867.99	N 32 16 9.90	W 103 36 48.10
	1994.00	0.70	282.87	1993.94	-2.85	-2.95	-12.34	0.27	462493.15	763867.06	N 32 16 9.90	W 103 36 48.11
	2089.00	0.48	279.84	2088.94	-2.65	-2.76	-13.30	0.23	462493.34	763866.10	N 32 16 9.90	W 103 36 48.12
	2184.00	0.48	268.76	2183.94	-2.58	-2.70	-14.09	0.10	462493.40	763865.31	N 32 16 9.90	W 103 36 48.13

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 ° ' ")
	2279.00	0.70	282.87	2278.93	-2.45	-2.58	-15.05	0.28	462493.52	763864.35	N 32 16 9.90	W 103 36 48.14
	2374.00	0.88	276.85	2373.92	-2.23	-2.36	-16.34	0.21	462493.74	763863.06	N 32 16 9.90	W 103 36 48.15
	2469.00	0.88	270.26	2468.91	-2.12	-2.27	-17.79	0.11	462493.83	763861.61	N 32 16 9.91	W 103 36 48.17
	2564.00	1.01	270.43	2563.90	-2.10	-2.26	-19.36	0.14	462493.84	763860.04	N 32 16 9.91	W 103 36 48.19
	2659.00	0.79	276.94	2658.89	-2.00	-2.17	-20.85	0.26	462493.93	763858.55	N 32 16 9.91	W 103 36 48.21
	2751.00	0.79	282.17	2750.88	-1.78	-1.96	-22.10	0.08	462494.14	763857.30	N 32 16 9.91	W 103 36 48.22
	2846.00	1.01	272.06	2845.87	-1.60	-1.80	-23.57	0.28	462494.30	763855.83	N 32 16 9.91	W 103 36 48.24
	2942.00	1.10	278.04	2941.85	-1.43	-1.64	-25.33	0.15	462494.46	763854.07	N 32 16 9.91	W 103 36 48.26
	3038.00	0.88	279.05	3037.83	-1.17	-1.39	-26.97	0.23	462494.71	763852.43	N 32 16 9.92	W 103 36 48.28
	3133.00	1.01	276.54	3132.82	-0.95	-1.18	-28.53	0.14	462494.92	763850.88	N 32 16 9.92	W 103 36 48.30
	3228.00	1.10	291.57	3227.81	-0.51	-0.75	-30.20	0.31	462495.35	763849.20	N 32 16 9.92	W 103 36 48.32
	3323.00	1.01	278.56	3322.79	-0.03	-0.29	-31.88	0.27	462495.81	763847.52	N 32 16 9.93	W 103 36 48.34
	3417.00	1.32	285.33	3416.77	0.39	0.12	-33.74	0.36	462496.22	763845.66	N 32 16 9.93	W 103 36 48.36
	3513.00	0.79	301.46	3512.75	1.04	0.76	-35.38	0.63	462496.86	763844.03	N 32 16 9.94	W 103 36 48.38
	3608.00	0.79	302.95	3607.74	1.75	1.45	-36.48	0.02	462497.55	763842.92	N 32 16 9.94	W 103 36 48.39
	3702.00	0.79	301.15	3701.74	2.45	2.14	-37.58	0.03	462498.24	763841.82	N 32 16 9.95	W 103 36 48.40
	3797.00	1.10	302.95	3796.72	3.29	2.98	-38.91	0.33	462499.08	763840.49	N 32 16 9.96	W 103 36 48.42
	3894.00	1.10	310.47	3893.70	4.42	4.09	-40.40	0.15	462500.19	763839.00	N 32 16 9.97	W 103 36 48.43
	3988.00	0.79	266.04	3987.69	4.97	4.63	-41.73	0.82	462500.73	763837.67	N 32 16 9.98	W 103 36 48.45
	4083.00	0.88	242.13	4082.68	4.59	4.24	-43.03	0.38	462500.34	763836.37	N 32 16 9.97	W 103 36 48.47
	4177.00	0.79	250.44	4176.67	4.05	3.69	-44.28	0.16	462499.79	763835.12	N 32 16 9.97	W 103 36 48.48
	4272.00	0.62	242.13	4271.67	3.60	3.23	-45.35	0.21	462499.33	763834.05	N 32 16 9.96	W 103 36 48.49
	4367.00	0.70	232.86	4366.66	3.01	2.64	-46.27	0.14	462498.74	763833.14	N 32 16 9.96	W 103 36 48.50
	4462.00	0.70	219.55	4461.65	2.22	1.84	-47.10	0.17	462497.94	763832.30	N 32 16 9.95	W 103 36 48.51
	4557.00	0.88	214.84	4556.64	1.18	0.79	-47.88	0.20	462496.89	763831.52	N 32 16 9.94	W 103 36 48.52
	4652.00	0.79	192.65	4651.63	-0.05	-0.44	-48.44	0.35	462495.66	763830.96	N 32 16 9.93	W 103 36 48.53
	4747.00	0.88	189.44	4746.62	-1.41	-1.80	-48.71	0.11	462494.30	763830.69	N 32 16 9.91	W 103 36 48.53
	4842.00	1.10	185.05	4841.61	-3.03	-3.43	-48.91	0.24	462492.67	763830.49	N 32 16 9.90	W 103 36 48.53
	4936.00	1.10	183.07	4935.59	-4.83	-5.23	-49.03	0.04	462490.87	763830.37	N 32 16 9.88	W 103 36 48.54
	5114.00	1.19	177.93	5113.56	-8.39	-8.78	-49.06	0.08	462487.32	763830.34	N 32 16 9.84	W 103 36 48.54
	5209.00	1.10	171.47	5208.54	-10.27	-10.67	-48.89	0.17	462485.43	763830.51	N 32 16 9.82	W 103 36 48.53
	5304.00	1.10	170.24	5303.52	-12.08	-12.47	-48.60	0.02	462483.63	763830.80	N 32 16 9.81	W 103 36 48.53
	5399.00	1.01	179.86	5398.50	-13.81	-14.21	-48.44	0.21	462481.89	763830.96	N 32 16 9.79	W 103 36 48.53
	5495.00	0.88	185.14	5494.49	-15.39	-15.79	-48.51	0.16	462480.31	763830.90	N 32 16 9.77	W 103 36 48.53
	5590.00	1.19	196.17	5589.48	-17.07	-17.46	-48.85	0.39	462478.64	763830.56	N 32 16 9.76	W 103 36 48.53
	5684.00	1.32	191.07	5683.45	-19.06	-19.46	-49.33	0.18	462476.64	763830.08	N 32 16 9.74	W 103 36 48.54
	5780.00	1.32	199.64	5779.43	-21.18	-21.59	-49.91	0.21	462474.51	763829.49	N 32 16 9.72	W 103 36 48.55
	5874.00	1.10	197.97	5873.41	-23.06	-23.47	-50.55	0.24	462472.63	763828.85	N 32 16 9.70	W 103 36 48.55
	5970.00	1.10	191.16	5969.39	-24.83	-25.25	-51.01	0.14	462470.85	763828.39	N 32 16 9.68	W 103 36 48.56
	6065.00	1.01	191.55	6064.37	-26.55	-26.96	-51.36	0.10	462469.14	763828.04	N 32 16 9.66	W 103 36 48.56
	6160.00	1.01	196.25	6159.36	-28.17	-28.59	-51.76	0.09	462467.51	763827.64	N 32 16 9.65	W 103 36 48.57
	6255.00	1.10	199.24	6254.34	-29.83	-30.25	-52.30	0.11	462465.85	763827.11	N 32 16 9.63	W 103 36 48.58
	6350.00	0.88	207.77	6349.33	-31.33	-31.76	-52.94	0.28	462464.34	763826.47	N 32 16 9.62	W 103 36 48.58
	6444.00	0.88	216.64	6443.32	-32.54	-32.98	-53.70	0.14	462463.13	763825.70	N 32 16 9.60	W 103 36 48.59
	6539.00	1.01	219.94	6538.30	-33.76	-34.20	-54.68	0.15	462461.90	763824.73	N 32 16 9.59	W 103 36 48.60
	6634.00	1.10	224.86	6633.29	-35.04	-35.49	-55.86	0.13	462460.61	763823.55	N 32 16 9.58	W 103 36 48.62
	6729.00	1.10	224.47	6728.27	-36.32	-36.79	-57.14	0.01	462459.31	763822.26	N 32 16 9.57	W 103 36 48.63
	6824.00	1.10	231.94	6823.25	-37.53	-38.00	-58.50	0.15	462458.10	763820.91	N 32 16 9.55	W 103 36 48.65

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 ° ' ")
	6919.00	1.32	226.36	6918.23	-38.83	-39.32	-60.01	0.26	462456.78	763819.40	N 32 16 9.54	W 103 36 48.67
	7013.00	1.32	219.55	7012.21	-40.40	-40.90	-61.48	0.17	462455.20	763817.92	N 32 16 9.53	W 103 36 48.68
	7108.00	1.49	217.66	7107.18	-42.21	-42.72	-62.93	0.19	462453.38	763816.47	N 32 16 9.51	W 103 36 48.70
	7204.00	1.32	206.93	7203.15	-44.17	-44.70	-64.19	0.33	462451.41	763815.21	N 32 16 9.49	W 103 36 48.72
	7299.00	1.49	196.74	7298.12	-46.33	-46.85	-65.04	0.32	462449.25	763814.36	N 32 16 9.47	W 103 36 48.73
	7394.00	1.49	190.45	7393.09	-48.72	-49.25	-65.62	0.17	462446.85	763813.78	N 32 16 9.44	W 103 36 48.73
	7489.00	1.58	189.75	7488.05	-51.22	-51.76	-66.07	0.10	462444.35	763813.33	N 32 16 9.42	W 103 36 48.74
	7584.00	0.62	174.55	7583.04	-53.02	-53.56	-66.24	1.05	462442.54	763813.16	N 32 16 9.40	W 103 36 48.74
	7679.00	0.48	155.87	7678.03	-53.90	-54.43	-66.03	0.24	462441.67	763813.37	N 32 16 9.39	W 103 36 48.74
	7774.00	0.48	181.05	7773.03	-54.66	-55.20	-65.88	0.22	462440.91	763813.53	N 32 16 9.39	W 103 36 48.74
	7869.00	0.79	183.86	7868.02	-55.71	-56.25	-65.93	0.33	462439.86	763813.47	N 32 16 9.37	W 103 36 48.74
	7964.00	0.70	201.35	7963.02	-56.90	-57.44	-66.18	0.26	462438.66	763813.22	N 32 16 9.36	W 103 36 48.74
	8059.00	0.70	211.37	8058.01	-57.93	-58.48	-66.70	0.13	462437.63	763812.71	N 32 16 9.35	W 103 36 48.75
	8154.00	0.70	215.24	8153.00	-58.90	-59.45	-67.33	0.05	462436.66	763812.07	N 32 16 9.34	W 103 36 48.75
	8250.00	0.70	212.25	8248.99	-59.87	-60.42	-67.98	0.04	462435.68	763811.42	N 32 16 9.33	W 103 36 48.76
	8345.00	0.79	214.27	8343.99	-60.89	-61.45	-68.66	0.10	462434.65	763810.74	N 32 16 9.32	W 103 36 48.77
	8440.00	1.01	216.25	8438.97	-62.10	-62.67	-69.53	0.23	462433.43	763809.88	N 32 16 9.31	W 103 36 48.78
	8535.00	0.70	224.64	8533.96	-63.18	-63.76	-70.43	0.35	462432.35	763808.97	N 32 16 9.30	W 103 36 48.79
	8630.00	0.70	233.56	8628.96	-63.94	-64.51	-71.30	0.11	462431.59	763808.10	N 32 16 9.29	W 103 36 48.80
	8725.00	0.70	241.87	8723.95	-64.55	-65.13	-72.28	0.11	462430.97	763807.12	N 32 16 9.29	W 103 36 48.81
	8819.00	0.70	240.33	8817.94	-65.09	-65.69	-73.29	0.02	462430.41	763806.11	N 32 16 9.28	W 103 36 48.82
	8914.00	0.88	235.76	8912.93	-65.78	-66.39	-74.40	0.20	462429.72	763805.01	N 32 16 9.28	W 103 36 48.84
	9009.00	1.00	242.66	9007.92	-66.56	-67.18	-75.74	0.17	462428.93	763803.67	N 32 16 9.27	W 103 36 48.85
	9104.00	0.79	271.05	9102.91	-66.92	-67.55	-77.13	0.51	462428.56	763802.28	N 32 16 9.26	W 103 36 48.87
	9199.00	0.88	274.35	9197.90	-66.84	-67.48	-78.51	0.11	462428.62	763800.89	N 32 16 9.26	W 103 36 48.88
	9293.00	0.79	269.34	9291.89	-66.78	-67.43	-79.88	0.12	462428.67	763799.53	N 32 16 9.27	W 103 36 48.90
	9388.00	0.40	271.36	9386.88	-66.77	-67.43	-80.86	0.41	462428.67	763798.54	N 32 16 9.27	W 103 36 48.91
	9483.00	0.40	272.24	9481.88	-66.75	-67.41	-81.53	0.01	462428.69	763797.88	N 32 16 9.27	W 103 36 48.92
	9578.00	0.79	276.54	9576.88	-66.65	-67.32	-82.51	0.41	462428.78	763796.90	N 32 16 9.27	W 103 36 48.93
	9673.00	1.49	246.26	9671.86	-67.06	-67.75	-84.29	0.95	462428.36	763795.11	N 32 16 9.26	W 103 36 48.95
	9767.00	1.71	268.37	9765.82	-67.57	-68.28	-86.81	0.69	462427.83	763792.59	N 32 16 9.26	W 103 36 48.98
	9862.00	1.71	293.64	9860.78	-67.02	-67.75	-89.52	0.79	462428.35	763789.88	N 32 16 9.26	W 103 36 49.01
	9957.00	0.40	277.86	9955.76	-66.39	-67.14	-91.15	1.40	462428.97	763788.25	N 32 16 9.27	W 103 36 49.03
	10052.00	0.62	197.75	10050.76	-66.83	-67.58	-91.64	0.71	462428.52	763787.77	N 32 16 9.26	W 103 36 49.04
	10147.00	0.79	213.96	10145.75	-67.86	-68.61	-92.16	0.27	462427.49	763787.24	N 32 16 9.25	W 103 36 49.04
	10242.00	0.79	218.27	10240.74	-68.91	-69.67	-92.93	0.06	462426.43	763786.47	N 32 16 9.24	W 103 36 49.05
	10338.00	0.40	270.96	10336.74	-69.42	-70.18	-93.68	0.66	462425.92	763785.73	N 32 16 9.24	W 103 36 49.06
	10433.00	0.88	261.56	10431.73	-69.52	-70.28	-94.73	0.52	462425.82	763784.67	N 32 16 9.24	W 103 36 49.07
	10528.00	0.79	234.14	10526.72	-70.00	-70.78	-95.98	0.43	462425.33	763783.42	N 32 16 9.23	W 103 36 49.09
	10545.00	0.79	230.75	10543.72	-70.14	-70.92	-96.17	0.27	462425.18	763783.24	N 32 16 9.23	W 103 36 49.09
	10591.00	0.86	167.50	10589.72	-70.67	-71.46	-96.34	1.89	462424.65	763783.07	N 32 16 9.23	W 103 36 49.09
	10622.00	2.06	30.45	10620.71	-70.42	-71.20	-96.01	8.88	462424.90	763783.40	N 32 16 9.23	W 103 36 49.09
	10654.00	5.93	12.70	10652.63	-68.32	-69.09	-95.35	12.55	462427.01	763784.05	N 32 16 9.25	W 103 36 49.08
	10685.00	10.28	5.59	10683.31	-64.01	-64.78	-94.73	14.37	462431.33	763784.67	N 32 16 9.29	W 103 36 49.07
	10717.00	15.40	3.87	10714.50	-56.93	-57.69	-94.16	16.04	462438.41	763785.24	N 32 16 9.36	W 103 36 49.07
	10749.00	21.09	3.13	10744.88	-46.94	-47.69	-93.56	17.80	462448.41	763785.84	N 32 16 9.46	W 103 36 49.06
	10781.00	26.28	2.52	10774.18	-34.11	-34.86	-92.94	16.24	462461.24	763786.47	N 32 16 9.59	W 103 36 49.05
	10813.00	30.41	2.22	10802.33	-18.93	-19.68	-92.31	12.91	462476.42	763787.09	N 32 16 9.74	W 103 36 49.04
	10844.00	34.05	2.41	10828.55	-2.42	-3.17	-91.64	11.75	462492.93	763787.76	N 32 16 9.90	W 103 36 49.03

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 ° ' '')
	10876.00	37.39	2.63	10854.53	16.23	15.50	-90.82	10.45	462511.59	763788.59	N 32 16 10.09	W 103 36 49.02
	10908.00	40.32	2.76	10879.45	36.27	35.55	-89.87	9.16	462531.64	763789.53	N 32 16 10.28	W 103 36 49.01
	10939.00	43.62	3.29	10902.49	56.96	56.25	-88.78	10.71	462552.34	763790.63	N 32 16 10.49	W 103 36 48.99
	10971.00	47.03	4.39	10924.99	79.65	78.94	-87.25	10.93	462575.04	763792.16	N 32 16 10.71	W 103 36 48.97
	11002.00	50.33	5.74	10945.45	102.82	102.13	-85.18	11.14	462598.23	763794.22	N 32 16 10.94	W 103 36 48.95
	11034.00	52.58	5.34	10965.39	127.71	127.04	-82.77	7.10	462623.14	763796.63	N 32 16 11.19	W 103 36 48.92
	11065.00	55.20	5.92	10983.66	152.61	151.96	-80.31	8.59	462648.06	763799.09	N 32 16 11.44	W 103 36 48.89
	11097.00	56.32	6.31	11001.66	178.89	178.26	-77.49	3.64	462674.36	763801.91	N 32 16 11.70	W 103 36 48.85
	11129.00	58.48	7.54	11018.90	205.62	205.02	-74.24	7.49	462701.12	763805.16	N 32 16 11.96	W 103 36 48.81
	11160.00	61.84	8.01	11034.33	232.23	231.66	-70.60	10.92	462727.75	763808.80	N 32 16 12.22	W 103 36 48.77
	11192.00	64.52	8.32	11048.76	260.46	259.93	-66.54	8.42	462756.02	763812.86	N 32 16 12.50	W 103 36 48.72
	11224.00	66.67	7.55	11061.98	289.28	288.79	-62.52	7.07	462784.88	763816.88	N 32 16 12.79	W 103 36 48.67
	11255.00	69.85	7.33	11073.47	317.80	317.34	-58.79	10.28	462813.43	763820.61	N 32 16 13.07	W 103 36 48.62
	11287.00	74.01	6.85	11083.39	347.95	347.52	-55.04	13.08	462843.61	763824.36	N 32 16 13.37	W 103 36 48.58
	11319.00	78.40	6.31	11091.02	378.79	378.38	-51.48	13.82	462874.47	763827.92	N 32 16 13.67	W 103 36 48.53
	11350.00	82.00	5.48	11096.29	409.14	408.76	-48.35	11.91	462904.85	763831.05	N 32 16 13.97	W 103 36 48.50
	11382.00	86.35	5.39	11099.54	440.80	440.45	-45.33	13.60	462936.53	763834.07	N 32 16 14.29	W 103 36 48.46
	11413.00	90.21	5.37	11100.47	471.62	471.29	-42.43	12.45	462967.38	763836.97	N 32 16 14.59	W 103 36 48.42
	11455.00	91.10	5.68	11099.99	513.39	513.09	-38.39	2.24	463009.18	763841.02	N 32 16 15.01	W 103 36 48.37
	11550.00	90.76	5.10	11098.45	607.88	607.66	-29.46	0.71	463103.74	763849.94	N 32 16 15.94	W 103 36 48.26
	11646.00	91.00	4.33	11096.97	703.48	703.32	-21.57	0.84	463199.40	763857.83	N 32 16 16.89	W 103 36 48.16
	11741.00	90.48	3.59	11095.75	798.18	798.09	-15.01	0.95	463294.16	763864.39	N 32 16 17.82	W 103 36 48.08
	11836.00	90.38	3.30	11095.03	892.96	892.91	-9.30	0.32	463388.98	763870.10	N 32 16 18.76	W 103 36 48.00
	11931.00	90.17	2.44	11094.58	987.80	987.79	-4.55	0.93	463483.86	763874.85	N 32 16 19.70	W 103 36 47.94
	12026.00	90.41	1.55	11094.10	1082.71	1082.73	-1.24	0.97	463578.79	763878.16	N 32 16 20.64	W 103 36 47.89
	12127.00	89.86	1.30	11093.86	1183.65	1183.70	1.27	0.60	463679.76	763880.67	N 32 16 21.64	W 103 36 47.86
	12216.00	89.45	1.03	11094.40	1272.61	1272.68	3.08	0.55	463768.73	763882.48	N 32 16 22.52	W 103 36 47.83
	12311.00	89.72	0.22	11095.08	1367.59	1367.67	4.12	0.90	463863.72	763883.52	N 32 16 23.46	W 103 36 47.81
	12406.00	89.69	358.25	11095.57	1462.59	1462.66	2.85	2.07	463958.70	763882.25	N 32 16 24.40	W 103 36 47.82
	12501.00	89.93	356.99	11095.89	1557.53	1557.57	-1.10	1.35	464053.62	763878.30	N 32 16 25.34	W 103 36 47.86
	12596.00	88.93	356.55	11096.83	1652.41	1652.42	-6.45	1.15	464148.46	763872.95	N 32 16 26.28	W 103 36 47.91
	12691.00	90.24	355.86	11097.52	1747.25	1747.20	-12.74	1.56	464243.24	763866.66	N 32 16 27.22	W 103 36 47.98
	12785.00	91.03	355.20	11096.48	1841.01	1840.91	-20.06	1.10	464336.94	763859.34	N 32 16 28.14	W 103 36 48.05
	12881.00	91.96	355.12	11093.97	1936.70	1936.53	-28.16	0.97	464432.56	763851.24	N 32 16 29.09	W 103 36 48.14
	12976.00	92.61	354.74	11090.19	2031.32	2031.09	-36.55	0.79	464527.11	763842.85	N 32 16 30.03	W 103 36 48.23
	13071.00	92.51	354.00	11085.94	2125.83	2125.53	-45.86	0.79	464621.56	763833.54	N 32 16 30.96	W 103 36 48.33
	13131.00	92.93	354.01	11083.10	2185.49	2185.14	-52.12	0.70	464681.16	763827.28	N 32 16 31.55	W 103 36 48.40
	13226.00	90.07	354.26	11080.61	2280.02	2279.60	-61.82	3.02	464775.62	763817.58	N 32 16 32.49	W 103 36 48.51
	13321.00	90.03	355.28	11080.53	2374.69	2374.20	-70.48	1.07	464870.21	763808.92	N 32 16 33.42	W 103 36 48.60
	13416.00	89.59	355.96	11080.84	2469.47	2468.92	-77.73	0.85	464964.93	763801.67	N 32 16 34.36	W 103 36 48.68
	13511.00	90.10	357.16	11081.10	2564.34	2563.75	-83.43	1.37	465059.76	763795.97	N 32 16 35.30	W 103 36 48.74
	13605.00	90.10	358.03	11080.93	2658.29	2657.66	-87.38	0.93	465153.67	763792.02	N 32 16 36.23	W 103 36 48.77
	13700.00	90.21	358.64	11080.68	2753.26	2752.62	-90.14	0.65	465248.62	763789.26	N 32 16 37.17	W 103 36 48.80
	13795.00	90.24	359.67	11080.30	2848.26	2847.61	-91.54	1.08	465343.61	763787.86	N 32 16 38.11	W 103 36 48.81
	13890.00	90.07	1.03	11080.05	2943.25	2942.61	-90.96	1.44	465438.60	763788.44	N 32 16 39.05	W 103 36 48.79
	13985.00	89.76	2.62	11080.19	3038.17	3037.56	-87.94	1.71	465533.55	763791.47	N 32 16 39.99	W 103 36 48.75
	14080.00	89.97	4.00	11080.41	3132.96	3132.39	-82.45	1.47	465628.38	763796.95	N 32 16 40.93	W 103 36 48.68
	14174.00	89.83	5.25	11080.58	3226.59	3226.09	-74.87	1.34	465722.07	763804.53	N 32 16 41.85	W 103 36 48.58

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 ° ' '')
	14267.00	90.21	5.68	11080.54	3319.09	3318.66	-66.01	0.62	465814.64	763813.39	N 32 16 42.77	W 103 36 48.47
	14364.00	90.14	6.62	11080.25	3415.44	3415.10	-55.62	0.97	465911.08	763823.78	N 32 16 43.72	W 103 36 48.35
	14458.00	90.55	6.54	11079.68	3508.73	3508.48	-44.85	0.44	466004.46	763834.55	N 32 16 44.65	W 103 36 48.21
	14553.00	90.34	6.05	11078.94	3603.07	3602.91	-34.43	0.56	466098.88	763844.97	N 32 16 45.58	W 103 36 48.08
	14648.00	90.34	5.19	11078.38	3697.53	3697.45	-25.13	0.91	466193.41	763854.27	N 32 16 46.51	W 103 36 47.97
	14744.00	90.55	4.09	11077.63	3793.14	3793.13	-17.37	1.17	466289.09	763862.03	N 32 16 47.46	W 103 36 47.87
	14839.00	90.58	2.88	11076.70	3887.91	3887.95	-11.59	1.27	466383.91	763867.81	N 32 16 48.40	W 103 36 47.80
	14933.00	90.41	1.77	11075.89	3981.80	3981.86	-7.78	1.19	466477.82	763871.62	N 32 16 49.33	W 103 36 47.74
	15029.00	90.52	0.58	11075.11	4077.75	4077.84	-5.81	1.24	466573.79	763873.59	N 32 16 50.28	W 103 36 47.71
	15124.00	90.62	359.27	11074.16	4172.74	4172.83	-5.93	1.38	466668.78	763873.47	N 32 16 51.22	W 103 36 47.71
	15220.00	90.07	358.97	11073.58	4268.74	4268.82	-7.41	0.65	466764.76	763871.99	N 32 16 52.17	W 103 36 47.72
	15315.00	90.03	359.56	11073.50	4363.74	4363.81	-8.63	0.62	466859.75	763870.77	N 32 16 53.11	W 103 36 47.72
	15409.00	89.59	359.70	11073.81	4457.74	4457.81	-9.23	0.49	466953.75	763870.17	N 32 16 54.04	W 103 36 47.72
Last Survey	15489.00	88.93	359.63	11074.85	4537.73	4537.80	-9.70	0.83	467033.73	763869.70	N 32 16 54.83	W 103 36 47.72
Proj to bit	15562.00	88.93	359.63	11076.21	4610.72	4610.78	-10.17	0.00	467106.72	763869.23	N 32 16 55.55	W 103 36 47.72

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	20.000	Act Stns	30.000	30.000	SLB_MWD-POOR-Depth Only	Original Borehole / Cimarex Triste Draw 30 Federal #2H MWD 0ft to
	20.000	10545.000	Act Stns	30.000	30.000	SLB_MWD-POOR	Original Borehole / Cimarex Triste Draw 30 Federal #2H MWD 0ft to
	10545.000	15489.000	Act Stns	30.000	30.000	SLB_MWD-STD	Original Borehole / Cimarex Triste Draw 30 Federal #2H MWD 0ft to
	15489.000	15562.000	Act Stns	30.000	30.000	SLB_BLIND+TREND	Original Borehole / Cimarex Triste Draw 30 Federal #2H MWD 0ft to