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30-025-41605



Cimarex Energy Perry 22 Federal 1H XEM+MWD Survey 0ft - 15368ft MD
Survey Geodetic Report
(Def Survey)



Report Date: August 13, 2014 - 09:35 AM
Client: Cimarex Energy
Field: NM Lea County (NAD 83)
Structure / Slot: Cimarex Perry 22 Federal 1H / Perry 22 Federal 1H
Well: Perry 22 Federal 1H
Borehole: Original Borehole
UWI / API#: Scandril Eagle / Unknown
Survey Name: Cimarex Energy Perry 22 Federal 1H XEM+MWD Survey 0ft - 15368ft MD
Survey Date: July 18, 2014
Tort / AHD / DDI / ERD Ratio: 153.300' / 4798.906 ft / 6.009 / 0.433
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 33' 53.88690", W 103° 32' 26.12048"
Location Grid N/E Y/X: N 570175.700 NUS, E 785563.300 NUS
CRS Grid Convergence Angle: 0.4267 °
Grid Scale Factor: 0.9999774
Version / Patch: 2.7.1043.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 183.610 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3680.000 ft above MSL
Seabed / Ground Elevation: 3655.000 ft above MSL
Magnetic Declination: 7.371 °
Total Gravity Field Strength: 998.5017mg (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 48474.397 nT
Magnetic Dip Angle: 60.425 °
Declination Date: August 03, 2014
Magnetic Declination Model: BGGM 2014
North Reference: Grid North
Grid Convergence Used: 0.4267 °
Total Corr Mag North-to-Grid North: 6.8445 °
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Closure Azimuth (°)	Closure (ft)	Northing (NUS)	Easting (NUS)	Latitude (N/S ° ° °)	Longitude (E/W ° ° °)	TF (°)
SHL	0.00	0.00	183.61	0.00	-3680.00	0.00	0.00	0.00	N/A	0.00	0.00	570175.70	785563.30	N 32 33 53.89	W 103 32 26.12	45.56M
	126.00	0.22	49.56	126.00	-3554.00	-0.18	0.17	0.17	0.17	45.56	0.24	570175.87	785563.47	N 32 33 53.89	W 103 32 26.12	112.89M
	220.00	0.09	112.89	220.00	-3460.00	-0.29	0.27	0.37	0.22	54.15	0.46	570175.97	785563.67	N 32 33 53.89	W 103 32 26.12	255.58M
	340.00	0.09	259.58	340.00	-3340.00	-0.24	0.21	0.36	0.14	59.61	0.42	570175.91	785563.66	N 32 33 53.89	W 103 32 26.12	336.48M
	461.00	0.09	336.48	461.00	-3219.00	-0.30	0.28	0.23	0.09	39.38	0.37	570175.88	785563.53	N 32 33 53.89	W 103 32 26.12	164.36M
	582.00	0.22	154.39	582.00	-3098.00	-0.16	0.15	0.26	0.26	60.26	0.30	570175.85	785563.96	N 32 33 53.89	W 103 32 26.12	172.25M
	648.00	0.22	172.26	648.00	-3034.00	0.07	-0.09	0.31	0.05	106.96	0.32	570175.61	785563.61	N 32 33 53.89	W 103 32 26.12	187.77M
	741.00	0.22	187.77	741.00	-2939.00	0.43	-0.45	0.31	0.06	146.03	0.55	570175.25	785563.61	N 32 33 53.88	W 103 32 26.12	246.48M
	837.00	0.22	246.48	837.00	-2843.00	0.70	-0.71	0.11	0.22	171.01	0.72	570174.99	785563.41	N 32 33 53.88	W 103 32 26.12	218.27M
	932.00	0.31	218.27	932.00	-2748.00	1.00	-0.99	-0.21	0.16	192.24	1.01	570174.71	785563.09	N 32 33 53.88	W 103 32 26.12	227.37M
	1028.00	0.31	227.37	1027.99	-2652.01	1.40	-1.37	-0.57	0.05	202.51	1.48	570174.33	785562.73	N 32 33 53.87	W 103 32 26.13	38.8M
	1123.00	0.31	38.80	1122.99	-2557.01	1.37	-1.34	-0.59	0.65	203.92	1.46	570174.36	785562.71	N 32 33 53.87	W 103 32 26.13	230.88M
	1218.00	0.31	230.88	1217.99	-2462.01	1.34	-1.30	-0.63	0.65	205.92	1.45	570174.40	785562.67	N 32 33 53.87	W 103 32 26.13	275.18M
	1313.00	0.31	275.18	1312.99	-2367.01	1.51	-1.44	-1.09	0.25	217.06	1.80	570174.26	785562.21	N 32 33 53.87	W 103 32 26.13	231.67M
	1408.00	0.31	231.67	1408.99	-2271.01	1.67	-1.58	-1.55	0.24	224.49	2.21	570174.12	785561.75	N 32 33 53.87	W 103 32 26.14	256.19M
	1504.00	0.31	256.19	1503.99	-2176.01	1.92	-1.80	-2.00	0.14	228.08	2.69	570173.90	785561.30	N 32 33 53.87	W 103 32 26.14	214.97M
	1590.00	0.22	214.97	1589.99	-2090.01	2.13	-1.99	-2.32	0.24	229.41	3.06	570173.71	785560.98	N 32 33 53.87	W 103 32 26.15	216.38M
	1707.00	0.00	216.38	1706.99	-1973.01	2.40	-2.25	-2.50	0.11	228.10	3.37	570173.45	785560.60	N 32 33 53.86	W 103 32 26.15	180.3M
	1822.00	0.22	180.30	1801.99	-1878.01	2.65	-2.49	-2.55	0.16	225.89	3.66	570173.21	785560.75	N 32 33 53.86	W 103 32 26.15	63.56M
	1897.00	0.00	53.56	1896.99	-1783.01	2.83	-2.67	-2.55	0.23	223.67	3.69	570173.03	785560.75	N 32 33 53.86	W 103 32 26.15	344.57M
	1992.00	0.09	344.57	1991.99	-1688.01	2.76	-2.60	-2.57	0.09	224.68	3.66	570173.10	785560.73	N 32 33 53.86	W 103 32 26.15	106.16M
	2087.00	0.22	106.16	2086.99	-1593.01	2.73	-2.58	-2.42	0.29	223.13	3.53	570173.12	785560.68	N 32 33 53.86	W 103 32 26.15	30.0M
	2183.00	0.22	30.00	2182.99	-1497.01	2.60	-2.47	-2.14	0.28	220.94	3.27	570173.23	785561.16	N 32 33 53.86	W 103 32 26.15	329.36M
	2278.00	0.09	329.36	2277.99	-1402.01	2.38	-2.25	-2.08	0.20	222.86	3.07	570173.45	785561.21	N 32 33 53.86	W 103 32 26.15	60.68M
	2373.00	0.31	60.68	2372.99	-1307.01	2.18	-2.06	-1.90	0.34	222.71	2.81	570173.64	785561.40	N 32 33 53.87	W 103 32 26.14	84.68M
	2468.00	0.31	84.68	2467.99	-1212.01	2.00	-1.91	-1.42	0.14	216.66	2.38	570173.79	785561.88	N 32 33 53.87	W 103 32 26.14	48.29M
	2593.00	0.22	48.29	2592.99	-1117.02	1.83	-1.77	-1.03	0.20	210.27	2.04	570173.93	785562.27	N 32 33 53.87	W 103 32 26.13	82.17M
	2659.00	0.31	82.17	2658.99	-1021.02	1.64	-1.61	-0.64	0.18	201.57	1.73	570174.09	785562.66	N 32 33 53.87	W 103 32 26.13	77.16M
	2754.00	0.48	77.16	2753.98	-926.02	1.48	-1.48	0.01	0.18	179.74	1.48	570174.22	785563.31	N 32 33 53.87	W 103 32 26.12	71.89M
	2849.00	0.70	71.89	2848.98	-831.02	1.15	-1.22	0.95	0.24	142.11	1.54	570174.48	785564.25	N 32 33 53.87	W 103 32 26.11	63.67M
	2945.00	1.01	63.67	2944.97	-735.03	0.51	-0.66	2.26	0.35	108.23	2.36	570175.04	785565.96	N 32 33 53.88	W 103 32 26.09	62.66M
	3040.00	1.19	62.66	3039.95	-640.05	-0.41	0.17	3.89	0.19	87.55	3.89	570175.87	785567.19	N 32 33 53.89	W 103 32 26.08	66.77M
	3135.00	1.32	66.77	3134.82	-545.08	-1.41	1.05	5.77	0.17	79.67	5.86	570176.75	785569.07	N 32 33 53.90	W 103 32 26.05	65.36M
	3230.00	1.71	65.36	3229.89	-450.11	-2.58	2.08	8.06	0.41	75.57	8.33	570177.78	785571.36	N 32 33 53.91	W 103 32 26.03	58.41M
	3325.00	1.58	58.40	3324.85	-355.15	-4.00	3.35	10.47	0.25	72.24	10.99	570178.05	785573.77	N 32 33 53.92	W 103 32 26.00	40.85M
	3420.00	1.49	40.86	3419.82	-260.18	-5.74	4.97	12.39	0.50	68.13	13.35	570180.67	785575.69	N 32 33 53.94	W 103 32 25.98	41.87M
	3515.00	1.89	41.87	3514.78	-165.22	-7.98	7.07	14.24	0.42	63.58	15.90	570182.77	785577.54	N 32 33 53.96	W 103 32 25.95	31.5M
	3611.00	1.10	31.50	3610.74	-69.26	-10.01	5.04	15.78	0.87	60.20	18.19	570184.74	785579.08	N 32 33 53.98	W 103 32 25.94	30.1M

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Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Closure Azimuth (°)	Closure (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	TF (°)
9694.00	0.88	71.36	9692.44	6012.44	-15.74	14.24	24.35	0.64	59.68	28.20	570189.54	785587.64	N 32 33 54.03	W 103 32 25.63	72.77M	
9790.00	0.48	72.77	9788.44	6108.44	-16.16	14.59	25.43	0.42	60.15	29.32	570190.29	785588.73	N 32 33 54.03	W 103 32 25.82	81.77M	
9885.00	0.79	81.77	9883.43	6203.43	-16.44	14.83	26.46	0.34	60.77	30.32	570190.50	785589.76	N 32 33 54.03	W 103 32 25.81	93.38M	
9980.00	1.19	93.38	9978.42	6298.42	-16.58	14.84	26.98	0.47	62.15	31.77	570190.54	785589.39	N 32 33 54.03	W 103 32 25.79	121.19M	
10076.00	0.88	121.19	10074.40	6394.40	-16.24	14.40	29.71	0.61	64.15	33.02	570190.10	785593.61	N 32 33 54.03	W 103 32 25.77	132.58M	
10171.00	0.79	132.58	10169.39	6489.39	-15.49	13.58	30.82	0.20	65.23	33.68	570169.28	785594.12	N 32 33 54.02	W 103 32 25.76	169.06M	
10266.00	0.48	169.06	10264.38	6584.38	-14.69	12.74	31.38	0.52	67.90	33.67	570188.44	785594.66	N 32 33 54.01	W 103 32 25.75	161.04M	
10361.00	0.70	161.80	10359.38	6679.38	-13.77	11.80	31.64	0.24	69.54	33.76	570187.50	785594.63	N 32 33 54.00	W 103 32 25.75	159.78M	
10379.00	0.88	159.78	10377.38	6697.38	-13.54	11.57	31.72	1.01	69.96	33.76	570187.27	785595.02	N 32 33 54.00	W 103 32 25.75	188.92M	
10443.00	2.16	188.92	10441.35	6761.35	-11.89	9.91	31.70	2.28	72.64	33.21	570185.61	785595.00	N 32 33 53.98	W 103 32 25.75	188.22M	
10475.00	6.75	198.22	10473.25	6793.25	-9.48	7.53	31.02	14.47	76.36	31.92	570183.23	785594.32	N 32 33 53.96	W 103 32 25.75	195.89M	
10507.00	11.88	195.89	10504.82	6824.82	-4.42	2.57	29.53	16.06	85.03	29.64	570178.27	785592.83	N 32 33 53.91	W 103 32 25.78	18.86L	
10538.00	14.43	192.42	10535.00	6855.00	2.52	-4.28	27.82	8.62	98.74	28.15	570171.42	785591.12	N 32 33 53.84	W 103 32 25.80	65.49L	
10570.00	15.62	184.04	10565.91	6885.91	10.77	-12.47	26.86	7.72	115.07	29.43	570163.23	785589.96	N 32 33 53.76	W 103 32 25.81	49.82L	
10597.00	16.69	179.81	10562.24	6902.24	15.49	-17.19	26.51	9.35	122.97	31.80	570158.51	785589.81	N 32 33 53.71	W 103 32 25.81	0.45R	
10619.00	19.64	179.88	10612.64	6932.64	25.44	-27.17	26.53	9.24	135.68	37.98	570148.53	785589.83	N 32 33 53.62	W 103 32 25.81	34.69R	
10651.00	22.65	165.12	10642.49	6962.49	36.97	-38.69	26.00	11.09	146.10	46.61	570137.01	785589.30	N 32 33 53.50	W 103 32 25.82	39.08R	
10682.00	26.27	191.51	10670.70	6990.70	49.74	-51.36	24.09	14.45	154.87	56.73	570124.34	785587.39	N 32 33 53.38	W 103 32 25.84	32.15R	
10714.00	29.95	196.05	10698.93	7018.93	64.56	-55.98	20.47	13.30	162.76	89.08	570109.72	785583.77	N 32 33 53.23	W 103 32 25.89	9.26L	
10746.00	34.78	196.01	10725.95	7045.95	81.28	-82.44	15.74	15.08	169.19	83.93	570093.28	785578.04	N 32 33 53.07	W 103 32 25.94	13.88R	
10776.00	39.42	197.81	10749.87	7069.87	98.88	-98.74	10.47	15.89	174.01	100.29	570075.96	785573.77	N 32 33 52.90	W 103 32 26.01	6.79R	
10807.00	44.56	198.88	10772.91	7092.91	118.94	-119.43	3.97	16.68	178.09	119.49	570056.27	785567.27	N 32 33 52.70	W 103 32 26.08	6.8L	
10839.00	47.64	198.03	10795.09	7115.09	141.24	-141.31	-3.28	9.75	181.33	141.35	570034.39	785562.02	N 32 33 52.49	W 103 32 26.17	23.74L	
10871.00	50.93	198.18	10815.67	7135.67	164.82	-164.48	-10.41	11.16	193.62	141.35	570011.21	785552.89	N 32 33 52.26	W 103 32 26.26	30.63L	
10903.00	54.78	193.41	10835.29	7155.29	189.84	-189.15	-16.90	13.89	185.11	189.90	569996.56	785546.61	N 32 33 52.02	W 103 32 26.33	26.68L	
10935.00	57.58	191.75	10853.10	7173.10	218.09	-215.08	-22.69	9.73	188.02	216.29	569980.61	785540.61	N 32 33 51.76	W 103 32 26.40	27.78L	
10967.00	59.69	190.47	10869.75	7189.75	243.18	-241.90	-27.95	7.45	186.59	243.51	569963.80	785535.35	N 32 33 51.50	W 103 32 26.47	21.99L	
10998.00	62.22	189.32	10884.80	7204.80	270.12	-268.60	-32.60	8.76	186.92	270.57	569947.11	785530.70	N 32 33 51.23	W 103 32 26.52	3.42L	
11030.00	64.88	189.14	10899.05	7219.05	298.63	-296.88	-37.20	8.35	187.14	299.20	569878.83	785525.10	N 32 33 50.95	W 103 32 26.58	13.81R	
11062.00	67.11	189.74	10912.07	7232.07	327.71	-325.71	-41.99	7.15	187.35	328.41	569855.00	785521.31	N 32 33 50.67	W 103 32 26.64	11.83R	
11093.00	68.51	186.05	10923.78	7243.78	358.24	-353.99	-46.92	4.63	187.55	357.08	569821.72	785516.38	N 32 33 50.39	W 103 32 26.70	8.51L	
11125.00	69.00	189.97	10935.37	7255.37	385.88	-383.36	-52.11	1.53	187.74	386.88	569792.35	785511.19	N 32 33 50.10	W 103 32 26.76	18.05L	
11157.00	71.62	188.07	10946.15	7266.15	415.85	-413.07	-57.09	8.61	187.87	417.00	569762.64	785506.22	N 32 33 49.80	W 103 32 26.82	8.65L	
11189.00	74.65	188.59	10955.44	7275.44	446.34	-443.33	-61.78	9.57	187.93	447.61	569732.38	785501.52	N 32 33 49.51	W 103 32 26.88	20.12L	
11220.00	75.61	188.22	10963.39	7283.39	476.19	-472.97	-66.16	3.32	187.96	477.57	569702.74	785497.14	N 32 33 49.21	W 103 32 26.93	18.17L	
11252.00	78.12	187.38	10970.66	7290.66	507.27	-503.84	-70.38	8.22	187.95	508.73	569671.87	785492.91	N 32 33 48.91	W 103 32 26.99	15.51L	
11284.00	80.00	186.63	10978.57	7296.57	538.66	-535.05	-74.24	8.06	187.90	540.18	569640.66	785488.06	N 32 33 48.60	W 103 32 27.03	19.39L	
11316.00	82.90	185.85	10981.15	7301.15	670.30	-666.53	-77.70	7.81	187.81	571.83	569609.19	785485.60	N 32 33 48.29	W 103 32 27.08	27.57L	
11378.00	84.66	184.96	10987.83	7307.83	631.90	-627.89	-83.50	3.09	187.58	633.42	569547.82	785479.80	N 32 33 47.88	W 103 32 27.15	19.01L	
11473.00	86.35	184.38	10995.27	7315.27	726.58	-722.28	-91.21	1.88	187.20	728.02	569453.44	785472.09	N 32 33 46.75	W 103 32 27.25	80.35L	
11568.00	88.52	183.37	11001.18	7321.18	821.40	-816.88	-97.61	1.07	186.81	822.69	569358.84	785465.69	N 32 33 45.81	W 103 32 27.33	49.75L	
11663.00	86.84	183.00	11006.68	7326.68	916.24	-911.57	-102.88	0.51	186.44	917.35	569264.15	785460.42	N 32 33 44.88	W 103 32 27.40	170.75L	
11758.00	85.60	182.80	11012.95	7332.95	1011.03	-1006.24	-107.67	1.32	186.11	1011.99	569169.48	785455.63	N 32 33 43.94	W 103 32 27.47	169.42L	
11856.00	81.61	182.05	11023.86	7343.86	1108.38	-1103.53	-111.79	4.13	185.78	1109.17	569072.20	785451.51	N 32 33 42.98	W 103 32 27.52	8.54L	
11851.00	83.56	181.75	11036.12	7356.12	1202.53	-1197.68	-114.91	2.07	185.48	1203.18	568978.05	785448.39	N 32 33 42.05	W 103 32 27.57	1.95R	
12047.00	86.04	181.84	11044.82	7364.82	1298.08	-1293.23	-117.90	2.58	185.21	1298.59	568882.51	785445.40	N 32 33 41.10	W 103 32 27.61	10.9R	
12142.00	88.07	182.23	11049.70	7369.70	1392.92	-1386.04	-121.27	2.18	184.99	1393.32	568787.70	785442.04	N 32 33 40.16	W 103 32 27.66	18.65R	
12238.00	89.52	182.72	11051.71	7371.71	1488.67	-1483.92	-125.40	1.59	184.83	1489.21	568691.81	785437.90	N 32 33 39.21	W 103 32 27.71	32.77L	
12333.00	89.76	182.55	11052.31	7372.31	1593.86	-1578.82	-129.78	0.30	184.70	1594.14	568596.62	785433.33	N 32 33 38.26	W 103 32 27.77	129.49R	
12427.00	89.66	182.63	11052.79	7372.79	1677.84	-1672.72	-134.08	0.17	184.58	1678.09	568503.02	785429.22	N 32 33 37.35	W 103 32 27.83	59.03R	
12522.00	89.85	183.03	11053.19	7373.19	1772.83	-1767.60	-138.82	0.42	184.49	1773.04	568408.14	785424.49	N 32 33 36.41	W 103 32 27.90	161.58R	
12616.00	89.76	183.06	11053.50	7373.50	1865.83	-1861.47	-143.81	0.12	184.42	1867.01	568314.28	785419.49	N 32 33 35.48	W 103 32 27.98	41.77R	
12711.00	90.07	183.34	11053.69	7373.69	1991.83	-1990.32	-146.10	0.44	184.38	1991.90	568210.43	785414.18	N 32 33 34.54	W 103 32 28.03	90.01R	
12806.00	90.07	183.62	11053.53	7373.53	2056.83	-2051.14	-154.89	0.30	184.32	2056.98	568124.61	785408.41	N 32 33 33.60	W 103 32 28.11	64.79R	
12901.00	90.24	183.99	11053.27	7373.27	2151.83	-2145.93	-161.20	0.43	184.30	2151.98	568026.82	785402.11	N 32 33 32.67	W 103 32 28.19	96.8R	
12995.00	90.14	184.85	11052.96	7372.96	2245.81	-2239.65	-168.44	0.93	184.30	2245.98	567936.10	785394.86	N 32 33 31.74	W 103 32 28.28	74R	
13090.00	90.28	185.35	11052.62	7372.62	2340.78	-2334.27	-176.89	0.54	184.33	2340.97	567841.49	785388.41	N 32 33 30.80	W 103 32 28.33	97.25R	
13185.00	90.21	185.90	11052.21	7372.21	2435.72	-2428.82	-186.20	0.59	184.38	2435.94	567746.94	785377.10	N 32 33 29.87	W 103 32 28.51	116.55L	
13279.00	89.83	185.14	11052.18	7372.18	2529.67	-2522.38	-195.24	0.90	184.43	2529.92	567653.38	785368.08	N 32 33 28.94	W 103 32 28.62	82.86L	
13374.00	89.86	184.90	11052.44	7372.44	2624.64	-2617.01	-203.56	0.25	184.45	2624.92	567558.75	785359.75	N 32 33 28.01	W 103 32 28.73	139.03L	
13469.00	89.76	184.81	11052.75	7372.75	271											

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Closure Azimuth (°)	Closure (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ° '")	Longitude (E/W ° ° '")	TF (°)
	13753.00	89.17	181.71	11056.99	7376.99	3003.55	-2995.14	-227.99	1.31	184.35	3003.60	567180.63	785335.51	N 32 33 24.27	W 103 32 29.04	104.75L
	13848.00	89.07	181.33	11058.45	7378.45	3088.48	-3090.09	-230.51	0.41	184.27	3098.68	567085.68	785332.80	N 32 33 23.33	W 103 32 29.08	56.77R
	13942.00	89.45	181.91	11055.67	7379.67	3192.41	-3184.05	-233.17	0.74	184.19	3192.57	566991.73	785330.14	N 32 33 22.40	W 103 32 29.12	LS
	14037.00	89.38	181.91	11060.84	7380.84	3287.37	-3278.99	-236.33	0.07	184.12	3287.50	566896.79	785326.97	N 32 33 21.46	W 103 32 29.17	90L
	14131.00	89.38	181.05	11061.65	7381.65	3381.29	-3372.95	-239.77	0.90	184.05	3381.39	566802.83	785324.54	N 32 33 20.53	W 103 32 29.20	82.41L
	14228.00	89.42	180.76	11062.65	7382.65	3476.18	-3467.94	-240.28	0.32	183.86	3476.25	566707.85	785323.03	N 32 33 19.59	W 103 32 29.23	14.04L
	14321.00	89.66	180.70	11063.41	7383.41	3571.06	-3562.92	-241.49	0.26	183.88	3571.10	566612.86	785321.82	N 32 33 18.65	W 103 32 29.25	142.43L
	14415.00	89.14	180.30	11064.39	7384.39	3664.92	-3656.92	-242.31	0.70	183.79	3664.99	566518.87	785321.00	N 32 33 17.72	W 103 32 29.27	53.3R
	14510.00	89.55	180.85	11065.48	7385.48	3759.78	-3751.90	-243.26	0.72	183.71	3759.78	566423.89	785320.04	N 32 33 16.78	W 103 32 29.29	110.32R
	14605.00	89.45	181.12	11066.31	7386.31	3854.57	-3846.39	-244.90	0.30	183.64	3854.67	566328.91	785318.41	N 32 33 15.84	W 103 32 29.32	71.56R
	14700.00	89.48	181.21	11067.20	7387.20	3949.58	-3941.86	-246.83	0.10	183.58	3949.68	566233.93	785316.48	N 32 33 14.90	W 103 32 29.35	102.81L
	14794.00	89.38	180.77	11068.13	7388.13	4043.48	-4035.84	-248.45	0.48	183.52	4043.48	566139.96	785314.86	N 32 33 13.97	W 103 32 29.37	81.26R
	14889.00	89.48	181.42	11069.08	7389.08	4138.38	-4130.82	-250.27	0.69	183.47	4138.40	566044.98	785313.04	N 32 33 13.03	W 103 32 29.40	66.37R
	14984.00	89.75	182.06	11069.71	7389.71	4233.33	-4225.77	-253.15	0.74	183.43	4233.35	565950.03	785310.16	N 32 33 12.09	W 103 32 29.45	144.73R
	15079.00	89.35	182.35	11070.44	7390.44	4328.30	-4320.70	-256.81	0.53	183.40	4328.33	565855.11	785308.50	N 32 33 11.16	W 103 32 29.50	83.61R
	15173.00	89.48	183.51	11071.40	7391.40	4422.28	-4414.57	-261.61	1.24	183.39	4422.32	565761.24	785301.70	N 32 33 10.23	W 103 32 29.55	84.88R
	15268.00	89.55	184.29	11072.21	7392.21	4517.28	-4509.35	-268.07	0.82	183.40	4517.31	565666.46	785295.24	N 32 33 9.29	W 103 32 29.64	116.01L
Final Survey	15300.00	89.35	183.88	11072.52	7392.52	4549.28	-4541.28	-270.35	1.43	183.41	4549.30	565634.55	785292.56	N 32 33 8.97	W 103 32 29.67	HS
Profile TD	15368.00	89.35	183.88	11073.29	7393.29	4617.27	-4609.10	-274.95	0.00	183.41	4617.30	565566.71	785288.35	N 32 33 8.30	W 103 32 29.73	

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	25.000	Act Sins	30.000	30.000	SLB_MWD-POOR-Depth Only	Original Borehole / Cimarex Energy Perry 22 Federal 1H
	1	25.000	10379.000	Act Sins	30.000	30.000	SLB_MWD-POOR	Original Borehole / Cimarex Energy Perry 22 Federal 1H
	1	10379.000	15300.000	Act Sins	30.000	30.000	SLB_MWD-STD	Original Borehole / Cimarex Energy Perry 22 Federal 1H
	1	15300.000	15368.000	Act Sins	30.000	30.000	SLB_BLIND-TREND	Original Borehole / Cimarex Energy Perry 22 Federal 1H