Reservoir Development
PathFinder, a Schlumberger Company
9200 West Reno Avenue
Oklahoma City, Oklahoma 73127 USA
Phone: (405) 789-1515
Fax: (405) 789-1519

PATHFINDER
A Schlumberger Company

September 17, 2015

Cimarex
600 N MARIENFELD STREET SUITE 600

MIDLAND ,TX 79701

Re:

SEC8-T25S-R27E
N 32.13822 W 104.20599

CLIENT:	Cimarex Energy Co.
WELL:	White City 8 Federal #5H
FIELD:	Wildcat G-02 S252715A; B.S.
RIG:	H&P 381
COUNTY:	Eddy
API NO:	30-015-41610
JOB NO:	15MLD2227

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.

Name & Title of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
Charles Lorence MWD	White City 8 Federal #5H Original Hole	7028.00 Ft 11896.00 Ft	to	September 14, 2015 September 17, 2015	to	SlimPulse

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

Joseph Hogan
Field Service Manager

Reservoir Development
PathFinder, a Schlumberger Company
9200 West Reno Avenue
Oklahoma City, Oklahoma 73127 USA
Phone: (405) 789-1515
Fax: (405) 789-1519

PATHFINDER
A Schlumberger Company

Well Reference:
SEC8-T25S-R27E
N 32.13822 W 104.20599

I, Charles Lorence certify that; I am employed by PathFinder, a division of Schlumberger Technology Corporation; that I did on the day(s) of September 14, 2015 through September 17, 2015, conduct or supervise the taking of the SlimPulse surveys from a depth of 7028.00 feet to a depth of 11896.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by PathFinder, 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 White City 8 Federal #5H Well (Original Hole) API No. 30-015-41610 and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by PathFinder, a division of Schlumberger Technology Corporation.

By
Charles Lorence
MWD

Alma Rozas on behalf Charles Lorence

Subscribed and Sworn to before me this 23rd day of September (month) 2015 (yr)

My Commission expires:
September 5, 2016

MICHELLE ELLWOOD
MY COMMISSION EXPIRES
September 5, 2016

Michelle Ellwood (signature)
Notary Public

Midland, TX
(County State)

Schlumberger

Cimarex White City 8 Federal #5H XEM + MWD 0ft to update Survey Report

(Non-Def Survey)

Report Date:	September 17, 2015 - 02:25 PM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	Cimarex	**Vertical Section Azimuth:**	359.714 ° (Grid North)
Field:	NM Eddy County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Cimarex White City 8 Federal #5H / Cimarex White City 8 Federal 5H	**TVD Reference Datum:**	RKB
Well:	Cimarex White City 8 Federal 5H	**TVD Reference Elevation:**	3268.000 ft above MSL
Borehole:	Original Borehole	**Seabed / Ground Elevation:**	3243.000 ft above MSL
UWI / API#:	Unknown / Unknown	**Magnetic Declination:**	7.606 °
Survey Name:	Cimarex White City 8 Federal #5H XEM + MWD 0ft to update	**Total Gravity Field Strength:**	998.4387mgn (9.80665 Based)
Survey Date:	September 07, 2015	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	169.357 ° / 4814.467 ft / 6.114 / 0.640	**Total Magnetic Field Strength:**	48224.585 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.917 °
Location Lat / Long:	N 32° 8' 17.58899", W 104° 12' 21.55463"	**Declination Date:**	September 07, 2015
Location Grid N/E Y/X:	N 414043.100 ftUS, E 580753.900 ftUS	**Magnetic Declination Model:**	HDGM 2015
CRS Grid Convergence Angle:	0.0677 °	**North Reference:**	Grid North
Grid Scale Factor:	0.99991087	**Grid Convergence Used:**	0.0677 °
Version / Patch:	2.8.572.0	**Total Corr Mag North->Grid North:**	7.5386 °
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	TF (°)	BR (°/100ft)	TR (°/100ft)	Closure (ft)	Closure Azimuth (°)
SHL Cimarex White City 8 Federal 5H [660' FEL, 330 FSL]	0.00	0.00	359.71	0.00	0.00	0.00	0.00	N/A	280.5M	N/A	N/A	0.00	0.00
	177.00	0.40	280.50	177.00	0.12	0.11	-0.61	0.23	328.78M	0.23	0.00	0.62	280.50
	207.00	0.48	328.78	207.00	0.24	0.24	-0.78	1.22	304.96M	0.27	160.93	0.81	287.14
	303.00	0.62	304.96	302.99	0.89	0.88	-1.41	0.28	270.86M	0.15	-24.81	1.66	301.99
	394.00	0.88	270.86	393.99	1.19	1.17	-2.51	0.56	276.09M	0.29	-37.47	2.77	295.04
	480.00	1.19	276.09	479.97	1.30	1.28	-4.06	0.38	278.15M	0.36	6.08	4.26	287.47
	575.00	1.32	278.15	574.95	1.57	1.54	-6.12	0.14	283.95M	0.14	2.17	6.31	284.09
	669.00	1.41	283.95	668.92	2.01	1.97	-8.32	0.18	288.26M	0.10	6.17	8.55	283.32
	760.00	1.41	288.26	759.89	2.64	2.59	-10.47	0.12	281.05M	0.00	4.74	10.78	283.90
	851.00	1.58	281.05	850.86	3.25	3.18	-12.76	0.28	276.88M	0.19	-7.92	13.15	284.00
	943.00	1.80	276.88	942.82	3.68	3.60	-15.44	0.27	276.18M	0.24	-4.53	15.86	283.12
	1034.00	2.02	276.18	1033.77	4.03	3.94	-18.46	0.24	268.97M	0.24	-0.77	18.87	282.06
	1125.00	2.02	268.97	1124.72	4.19	4.09	-21.65	0.28	270.29M	0.00	-7.92	22.04	280.69
	1217.00	2.11	270.29	1216.66	4.19	4.07	-24.97	0.11	269.58M	0.10	1.43	25.30	279.25
	1308.00	1.71	269.58	1307.61	4.20	4.06	-28.00	0.44	262.29M	-0.44	-0.78	28.29	278.26
	1398.00	0.79	262.29	1397.58	4.12	3.97	-29.96	1.04	270.86M	-1.02	-8.10	30.22	277.55
	1492.00	0.88	270.86	1491.57	4.05	3.89	-31.32	0.16	90.86M	0.10	9.12	31.56	277.09
	1587.00	0.31	90.86	1586.57	4.06	3.90	-31.80	1.25	100.97M	-0.60	-189.47	32.03	277.00
	1682.00	1.41	100.97	1681.56	3.83	3.68	-30.39	1.16	96.79M	1.16	10.64	30.61	276.90
	1777.00	2.29	96.79	1776.51	3.37	3.23	-27.36	0.94	97.98M	0.93	-4.40	27.55	276.73
	1871.00	3.21	97.98	1870.40	2.76	2.64	-22.89	0.98	108.88M	0.98	1.27	23.04	276.58
	1993.00	0.70	108.88	1992.32	2.02	1.93	-18.80	2.07	118.06M	-2.06	8.93	18.90	275.85
	2062.00	0.70	118.06	2061.31	1.68	1.59	-18.03	0.16	103.47M	0.00	13.30	18.10	275.04
	2158.00	0.48	103.47	2157.31	1.31	1.22	-17.12	0.28	105.05M	-0.23	-15.20	17.16	274.08
	2253.00	0.62	105.05	2252.30	1.08	1.00	-16.24	0.15	109.05M	0.15	1.66	16.27	273.51
	2348.00	0.62	109.05	2347.30	0.77	0.69	-15.25	0.05	81.59M	0.00	4.21	15.27	272.61

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	TF (°)	BR (°/100ft)	TR (°/100ft)	Closure (ft)	Closure Azimuth (°)
	2443.00	0.62	81.59	2442.29	0.67	0.60	-14.26	0.31	89.28M	0.00	-28.91	14.27	272.42
	2537.00	0.70	89.28	2536.29	0.75	0.68	-13.18	0.13	78.38M	0.09	8.18	13.20	272.97
	2632.00	0.48	78.38	2631.28	0.83	0.77	-12.21	0.26	72.49M	-0.23	-11.47	12.24	273.61
	2727.00	0.48	72.49	2726.28	1.03	0.97	-11.44	0.05	77.76M	0.00	-6.20	11.48	274.85
	2822.00	0.48	77.76	2821.28	1.23	1.17	-10.67	0.05	76.27M	0.00	5.55	10.74	276.28
	2917.00	0.40	76.27	2916.27	1.39	1.34	-9.96	0.09	72.67M	-0.08	-1.57	10.05	277.65
	3011.00	0.31	72.67	3010.27	1.54	1.49	-9.40	0.10	58.56M	-0.10	-3.83	9.52	279.01
	3106.00	0.31	58.56	3105.27	1.75	1.70	-8.94	0.08	4.07M	0.00	-14.85	9.10	280.78
	3201.00	0.22	4.07	3200.27	2.06	2.02	-8.71	0.27	7.63M	-0.09	-57.36	8.94	283.05
	3296.00	0.00	7.63	3295.27	2.24	2.20	-8.69	0.23	311.55M	-0.23	0.00	8.97	284.20
	3391.00	0.22	311.55	3390.27	2.36	2.32	-8.83	0.23	277.98M	0.23	0.00	9.13	284.73
	3488.00	0.22	277.98	3487.27	2.52	2.47	-9.15	0.13	216.85M	0.00	-34.61	9.48	285.10
	3581.00	0.40	216.85	3580.27	2.28	2.24	-9.52	0.38	206.65M	0.19	-65.73	9.78	283.21
	3676.00	0.62	206.65	3675.26	1.56	1.51	-9.95	0.25	206.08M	0.23	-10.74	10.07	278.63
	3771.00	0.48	206.08	3770.26	0.75	0.69	-10.36	0.15	215.49M	-0.15	-0.60	10.38	273.83
	3865.00	0.79	215.49	3864.25	-0.13	-0.19	-10.91	0.35	225.99M	0.33	10.01	10.91	269.01
	3960.00	0.70	225.99	3959.24	-1.07	-1.12	-11.71	0.17	201.16M	-0.09	11.05	11.76	264.51
	4055.00	0.48	201.16	4054.24	-1.84	-1.90	-12.27	0.35	219.09M	-0.23	-26.14	12.41	261.20
	4150.00	0.31	219.09	4149.24	-2.41	-2.47	-12.57	0.22	195.36M	-0.18	18.87	12.81	258.89
	4245.00	0.40	195.36	4244.24	-2.92	-2.99	-12.82	0.18	191.58M	0.09	-24.98	13.17	256.88
	4340.00	0.48	191.58	4339.23	-3.63	-3.70	-12.99	0.09	198.26M	0.08	-3.98	13.51	254.11
	4434.00	0.48	198.26	4433.23	-4.39	-4.46	-13.19	0.06	194.57M	0.00	7.11	13.93	251.33
	4529.00	0.40	194.57	4528.23	-5.09	-5.16	-13.40	0.09	185.17M	-0.08	-3.88	14.36	248.95
	4624.00	0.48	185.17	4623.22	-5.81	-5.87	-13.52	0.11	165.65M	0.08	-9.89	14.74	246.52
	4719.00	0.48	165.65	4718.22	-6.59	-6.66	-13.46	0.17	172.38M	0.00	-20.55	15.01	243.69
	4814.00	0.70	172.38	4813.22	-7.55	-7.62	-13.28	0.24	173.08M	0.23	7.08	15.31	240.17
	4908.00	0.40	173.08	4907.21	-8.45	-8.51	-13.17	0.32	165.96M	-0.32	0.74	15.68	237.12
	5003.00	0.48	165.96	5002.21	-9.16	-9.23	-13.03	0.10	181.78M	0.08	-7.49	15.97	234.70
	5098.00	0.62	181.78	5097.20	-10.06	-10.13	-12.95	0.22	171.19M	0.15	16.65	16.44	231.98
	5193.00	0.79	171.19	5192.20	-11.22	-11.29	-12.86	0.22	183.28M	0.18	-11.15	17.11	228.74
	5288.00	1.01	183.28	5287.18	-12.71	-12.77	-12.81	0.30	193.87M	0.23	12.73	18.09	225.10
	5381.00	0.88	193.87	5380.17	-14.22	-14.28	-13.03	0.23	191.05M	-0.14	11.39	19.33	222.38
	5477.00	1.01	191.05	5476.16	-15.76	-15.83	-13.37	0.14	209.47M	0.14	-2.94	20.72	220.19
	5572.00	1.01	209.47	5571.14	-17.31	-17.38	-13.94	0.34	223.18M	0.00	19.39	22.28	218.74
	5667.00	0.88	223.18	5666.13	-18.56	-18.64	-14.85	0.27	269.76M	-0.14	14.43	23.83	218.55
	5762.00	1.49	269.76	5761.11	-19.09	-19.18	-16.59	1.15	276.09M	0.64	49.03	25.36	220.86
	5857.00	1.58	276.09	5856.08	-18.95	-19.04	-19.12	0.20	277.19M	0.09	6.66	26.99	225.12
	5952.00	1.58	277.19	5951.04	-18.63	-18.74	-21.73	0.03	269.28M	0.00	1.16	28.69	229.22
	6047.00	2.20	269.28	6045.99	-18.47	-18.60	-24.85	0.71	270.68M	0.65	-8.33	31.04	233.19
	6141.00	2.81	270.68	6139.90	-18.45	-18.59	-28.96	0.65	206.87M	0.65	1.49	34.41	237.29
	6236.00	1.19	206.87	6234.85	-19.29	-19.45	-31.73	2.65	175.67M	-1.71	-67.17	37.22	238.50
	6331.00	1.58	175.67	6329.82	-21.47	-21.63	-32.08	0.88	198.96M	0.41	-32.84	38.69	236.01
	6426.00	2.11	198.96	6424.77	-24.43	-24.59	-32.55	0.96	202.48M	0.56	24.52	40.79	232.93
	6521.00	2.29	202.48	6519.70	-27.83	-28.00	-33.84	0.24	221.68M	0.19	3.71	43.92	230.40
	6616.00	2.68	221.68	6614.62	-31.23	-31.41	-36.05	0.96	222.39M	0.41	20.21	47.81	228.93
	6710.00	2.11	222.39	6708.53	-34.14	-34.33	-38.67	0.61	233.15M	-0.61	0.76	51.71	228.40
	6805.00	2.50	233.15	6803.46	-36.66	-36.87	-41.51	0.61	215.36M	0.41	11.33	55.52	228.39
	6900.00	2.02	215.36	6898.38	-39.25	-39.47	-44.14	0.89	183.67M	-0.51	-18.73	59.21	228.19
	6970.00	2.11	183.67	6968.34	-41.54	-41.77	-44.93	1.62	181.97M	0.13	-45.27	61.35	227.09
Begin Schlumberger MWD Surveys	7028.00	1.72	181.97	7026.31	-43.48	-43.70	-45.03	0.68	23.56M	-0.67	-2.93	62.75	225.86
	7061.00	2.52	23.56	7059.30	-43.31	-43.53	-44.76	12.63	18.48M	2.42	-480.03	62.44	225.80
	7093.00	6.85	18.48	7091.18	-40.86	-41.08	-43.87	13.58	16.67M	13.53	-15.88	60.10	226.89
	7123.00	11.23	16.67	7120.80	-36.37	-36.58	-42.47	14.63	17.66L	14.60	-6.03	56.05	229.26
	7172.00	17.14	10.39	7168.29	-24.70	-24.90	-39.79	12.45	20.36L	12.06	-12.82	46.94	237.97
	7219.00	23.17	4.80	7212.40	-8.66	-8.85	-37.77	13.45	6.06L	12.83	-11.89	38.79	256.81
	7266.00	29.61	3.42	7254.48	12.15	11.97	-36.30	13.76	1.79L	13.70	-2.94	38.22	288.26
	7314.00	36.46	3.06	7294.69	38.26	38.08	-34.83	14.28	3.15R	14.27	-0.75	51.61	317.56
	7361.00	42.49	3.55	7330.96	68.06	67.90	-33.10	12.85	8.99R	12.83	1.04	75.54	334.01
	7409.00	47.69	4.66	7364.83	101.94	101.79	-30.65	10.96	1.88L	10.83	2.31	106.31	343.24
	7456.00	52.79	4.45	7394.88	137.93	137.80	-27.79	10.86	0.74R	10.85	-0.45	140.57	348.60

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	TF (°)	BR (°/100ft)	TR (°/100ft)	Closure (ft)	Closure Azimuth (°)
	7504.00	58.78	4.54	7421.86	177.47	177.35	-24.68	12.48	14.68L	12.48	0.19	179.06	352.08
	7551.00	63.76	3.09	7444.45	218.57	218.46	-21.95	10.94	7.74L	10.60	-3.09	219.56	354.26
	7599.00	68.99	2.33	7463.68	262.47	262.37	-19.87	10.99	5.81L	10.90	-1.58	263.12	355.67
	7646.00	74.39	1.76	7478.44	307.03	306.95	-18.29	11.55	4.55L	11.49	-1.21	307.49	356.59
	7693.00	78.96	1.39	7489.27	352.73	352.65	-17.03	9.75	9.94R	9.72	-0.79	353.06	357.24
	7740.00	82.30	1.98	7496.92	399.07	399.00	-15.67	7.21	14.7L	7.11	1.26	399.31	357.75
	7788.00	88.14	0.45	7500.92	446.87	446.80	-14.66	12.57	21.27L	12.17	-3.19	447.04	358.12
	7851.00	91.07	359.31	7501.35	509.86	509.79	-14.79	4.99	30.95L	4.65	-1.81	510.00	358.34
	7918.00	91.72	358.92	7499.72	576.83	576.76	-15.82	1.13	80.31R	0.97	-0.58	576.98	358.43
	8013.00	91.96	0.33	7496.67	671.78	671.71	-16.44	1.50	61.11R	0.25	1.48	671.91	358.60
	8108.00	92.61	1.51	7492.88	766.68	766.62	-14.92	1.42	177.36L	0.68	1.24	766.76	358.89
	8202.00	91.96	1.48	7489.13	860.56	860.51	-12.47	0.69	131.2R	-0.69	-0.03	860.60	359.17
	8297.00	91.82	1.64	7486.00	955.46	955.42	-9.88	0.22	157.49R	-0.15	0.17	955.47	359.41
	8392.00	91.41	1.81	7483.32	1050.36	1050.34	-7.03	0.47	114.98L	-0.43	0.18	1050.37	359.62
	8486.00	91.00	0.93	7481.35	1144.30	1144.29	-4.78	1.03	75.58R	-0.44	-0.94	1144.30	359.76
	8581.00	91.38	2.41	7479.37	1239.22	1239.23	-2.01	1.61	90L	0.40	1.56	1239.23	359.91
	8676.00	91.38	1.53	7477.09	1334.12	1334.14	1.25	0.93	98.13L	0.00	-0.93	1334.15	0.05
	8771.00	90.96	358.60	7475.15	1429.09	1429.11	1.36	3.12	73.15L	-0.44	-3.08	1429.12	0.05
	8865.00	91.58	356.55	7473.06	1523.00	1523.00	-2.61	2.28	146.52L	0.66	-2.18	1523.00	359.90
	8960.00	90.93	356.12	7470.98	1617.81	1617.78	-8.69	0.82	108.19R	-0.68	-0.45	1617.81	359.69
	9055.00	90.45	357.58	7469.84	1712.68	1712.63	-13.91	1.62	90R	-0.51	1.54	1712.69	359.53
	9149.00	90.45	358.44	7469.10	1806.63	1806.57	-17.17	0.91	152.78R	0.00	0.91	1806.65	359.46
	9244.00	89.07	359.15	7469.50	1901.62	1901.55	-19.17	1.63	123.12L	-1.45	0.75	1901.64	359.42
	9339.00	88.62	358.46	7471.41	1996.59	1996.50	-21.15	0.87	15.52L	-0.47	-0.73	1996.62	359.39
	9434.00	88.80	358.41	7473.55	2091.54	2091.45	-23.74	0.20	99.61R	0.19	-0.05	2091.58	359.35
	9528.00	88.69	359.06	7475.61	2185.50	2185.40	-25.82	0.70	90R	-0.12	0.69	2185.55	359.32
	9623.00	88.69	359.27	7477.78	2280.47	2280.36	-27.20	0.22	90R	0.00	0.22	2280.53	359.32
	9718.00	88.69	359.92	7479.95	2375.45	2375.34	-27.87	0.68	3.92R	0.00	0.68	2375.50	359.33
	9812.00	89.42	359.97	7481.50	2469.43	2469.32	-27.96	0.78	141.49R	0.78	0.05	2469.48	359.35
	9907.00	88.93	0.36	7482.87	2564.42	2564.31	-27.69	0.66	173.52R	-0.52	0.41	2564.46	359.38
	10002.00	88.49	0.41	7485.01	2659.39	2659.29	-27.05	0.47	29.29R	-0.46	0.05	2659.42	359.42
	10097.00	88.90	0.64	7487.17	2754.35	2754.26	-26.18	0.49	174.29R	0.43	0.24	2754.38	359.46
	10191.00	88.80	0.65	7489.06	2848.32	2848.23	-25.12	0.11	116.58L	-0.11	0.01	2848.34	359.49
	10286.00	88.49	0.03	7491.31	2943.29	2943.20	-24.56	0.73	108.14R	-0.33	-0.65	2943.31	359.52
	10381.00	88.14	1.10	7494.10	3038.24	3038.16	-23.62	1.18	99.86R	-0.37	1.13	3038.25	359.55
	10475.00	87.83	2.89	7497.41	3132.10	3132.04	-20.35	1.93	38.51R	-0.33	1.90	3132.10	359.63
	10570.00	88.76	3.63	7500.23	3226.87	3226.84	-14.95	1.25	28.01L	0.98	0.78	3226.87	359.73
	10665.00	90.17	2.88	7501.12	3321.69	3321.68	-9.56	1.68	74.83L	1.48	-0.79	3321.69	359.84
	10759.00	90.72	0.85	7500.39	3415.61	3415.62	-6.50	2.24	78L	0.59	-2.16	3415.63	359.89
	10854.00	90.96	359.72	7499.00	3510.59	3510.61	-6.03	1.22	142.61L	0.25	-1.19	3510.61	359.90
	10949.00	89.73	358.78	7498.42	3605.59	3605.60	-7.27	1.63	148.8L	-1.29	-0.99	3605.60	359.88
	11043.00	88.69	358.15	7499.72	3699.55	3699.55	-9.79	1.29	83.12R	-1.11	-0.67	3699.56	359.85
	11138.00	88.80	359.06	7501.80	3794.51	3794.50	-12.10	0.96	97.13R	0.12	0.96	3794.52	359.82
	11233.00	88.73	359.62	7503.85	3889.49	3889.47	-13.19	0.59	49.31L	-0.07	0.59	3889.49	359.81
	11327.00	89.59	358.62	7505.23	3983.47	3983.45	-14.64	1.40	131.37L	0.91	-1.06	3983.47	359.79
	11422.00	89.00	357.95	7506.40	4078.43	4078.40	-17.48	0.94	140.52R	-0.62	-0.71	4078.43	359.75
	11517.00	87.69	359.03	7509.14	4173.37	4173.32	-19.98	1.79	114.21R	-1.38	1.14	4173.37	359.73
	11612.00	87.08	0.39	7513.47	4268.27	4268.22	-20.46	1.57	13.56R	-0.64	1.43	4268.27	359.73
	11706.00	87.66	0.53	7517.79	4362.16	4362.12	-19.71	0.63	34.1R	0.62	0.15	4362.16	359.74
	11801.00	88.62	1.18	7520.87	4457.09	4457.05	-18.29	1.22	55.67L	1.01	0.68	4457.09	359.76
	11896.00	89.31	0.17	7522.59	4552.06	4552.03	-17.17	1.29	HS	0.73	-1.06	4552.06	359.78
Projection to Bit	11985.00	89.31	0.17	7523.66	4641.05	4641.02	-16.91	0.00		0.00	0.00	4641.05	359.79

Survey Type: Non-Def Survey

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

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	TF (°)	BR (°/100ft)	TR (°/100ft)	Closure (ft)	Closure Azimuth (°)

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	25.000	1/98.425	30.000	30.000	SLB_MWD-POOR-Depth Only	Original Borehole / Cimarex White City 8 Federal #5H XEM + MWD
	1	25.000	25.000	Act Stns	30.000	30.000	SLB_MWD-POOR-Depth Only	Original Borehole / Cimarex White City 8 Federal #5H XEM + MWD
	1	25.000	6970.000	Act Stns	30.000	30.000	SLB_MWD-POOR	Original Borehole / Cimarex White City 8 Federal #5H XEM + MWD
	1	6970.000	11985.000	Act Stns	30.000	30.000	SLB_MWD-STD	Original Borehole / Cimarex White City 8 Federal #5H XEM + MWD