

30-025-39960

COG OPERATING

Lusk
Lea County, NM
Citation X Federal Com #1H
VH - Job #32K1210981

RECEIVED

APR 13 2011
HOBBSD

Survey: Actual

SDI Standard Survey Report

16 December, 2010

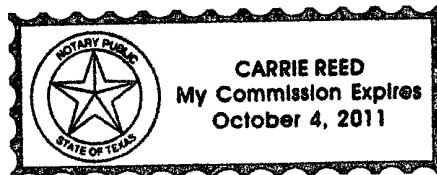
This survey is correct to the best of my knowledge and is supported by actual field data.

Robert

Notorized this date 3/6 of December, 2010.

Carrie Reed

Notary Signature
County of Midland
State of Texas



Scientific Drilling International, Inc.
SDI Standard Survey Report

Company:	COG OPERATING	Local Co-ordinate Reference:	Well Citation X Federal Com #1H
Project:	Lusk	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Lea County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Citation X Federal Com #1H	North Reference:	Grid
Wellbore:	VH - Job #32K1210981	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K1210981	Database:	EDM-Regulatory

Project:	Lusk		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Lea County, NM				
Site Position:		Northing:	608,010.37 usft	Latitude:	32° 40' 13.174 N
From:	Lat/Long	Easting:	668,500.03 usft	Longitude:	103° 47' 8.729 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.30 °

Well	Citation X Federal Com #1H, Directional (Pathfinder)				
Well Position	+N/-S	0.0 usft	Northing:	608,010.37 usft	Latitude: 32° 40' 13.174 N
	+E/-W	0.0 usft	Easting:	668,500.03 usft	Longitude: 103° 47' 8.729 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level: 0.0 usft

Wellbore	VH - Job #32K1210981				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	12/10/2010	7.84	60.59	48,977

Design	VH - Job #32K1210981				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	179.60	

Survey Program	Date	12/16/2010		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	7,864.0	Actual (VH - Job #32K1210981)	Keeper	Keeper Gyro

Survey								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0	
100.0	0.38	235.88	100.0	-0.2	-0.3	235.88	0.3	
200.0	0.40	238.35	200.0	-0.6	-0.8	236.73	1.0	
300.0	0.37	244.85	300.0	-0.9	-1.4	238.62	1.7	
400.0	0.32	241.59	400.0	-1.1	-2.0	239.86	2.3	
500.0	0.44	244.23	500.0	-1.4	-2.6	240.60	2.9	
600.0	0.52	237.56	600.0	-1.9	-3.3	240.60	3.8	
700.0	0.63	230.72	700.0	-2.4	-4.1	239.18	4.8	
800.0	0.87	231.83	800.0	-3.3	-5.1	237.50	6.1	
900.0	0.87	229.58	900.0	-4.2	-6.3	236.14	7.6	
1,000.0	0.97	233.20	999.9	-5.2	-7.6	235.33	9.2	
1,100.0	0.68	225.94	1,099.9	-6.1	-8.7	234.64	10.6	

Scientific Drilling International, Inc.

SDI Standard Survey Report

Company: COG OPERATING
Project: Lusk
Site: Lea County, NM
Well: Citation X Federal Com #1H
Wellbore: VH - Job #32K1210981
Design: VH - Job #32K1210981

Local Co-ordinate Reference: Well Citation X Federal Com #1H
TVD Reference: WELL @ 0.0usft (Original Well Elev)
MD Reference: WELL @ 0.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM-Regulatory

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
1,200.0	0.68	222.62	1,199.9	-7.0	-9.5	233.60	11.8
1,300.0	0.77	229.45	1,299.9	-7.9	-10.4	232.89	13.0
1,400.0	0.92	239.73	1,399.9	-8.7	-11.6	233.11	14.5
1,500.0	0.87	239.36	1,499.9	-9.5	-13.0	233.74	16.1
1,600.0	0.68	238.86	1,599.9	-10.2	-14.1	234.15	17.4
1,700.0	0.20	211.99	1,699.9	-10.6	-14.7	234.10	18.2
1,800.0	0.51	83.30	1,799.9	-10.7	-14.4	233.20	17.9
1,900.0	1.47	61.35	1,899.9	-10.1	-12.8	231.77	16.3
2,000.0	3.13	59.90	1,999.8	-8.1	-9.3	228.99	12.3
2,100.0	3.83	65.33	2,099.6	-5.3	-3.9	216.26	6.6
2,200.0	3.91	64.80	2,199.4	-2.5	2.2	138.36	3.3
2,300.0	3.91	65.41	2,299.1	0.4	8.4	87.37	8.4
2,400.0	3.79	63.85	2,398.9	3.3	14.5	77.30	14.8
2,500.0	3.66	64.89	2,498.7	6.1	20.3	73.36	21.2
2,600.0	2.06	55.58	2,598.6	8.4	24.7	71.13	26.1
2,700.0	0.84	338.56	2,698.6	10.1	25.9	68.62	27.8
2,800.0	1.02	318.93	2,798.5	11.5	25.1	65.36	27.6
2,900.0	1.31	312.28	2,898.5	12.9	23.6	61.30	26.9
3,000.0	1.34	310.45	2,998.5	14.5	21.9	56.55	26.2
3,100.0	1.40	309.28	3,098.5	16.0	20.1	51.43	25.6
3,200.0	1.12	313.72	3,198.4	17.4	18.4	46.53	25.4
3,300.0	1.05	314.02	3,298.4	18.8	17.0	42.25	25.3
3,400.0	1.25	311.80	3,398.4	20.1	15.6	37.73	25.4
3,500.0	1.24	312.86	3,498.4	21.6	14.0	32.89	25.7
3,600.0	1.19	311.59	3,598.4	23.0	12.4	28.30	26.1
3,700.0	1.22	312.85	3,698.3	24.4	10.8	23.92	26.7
3,800.0	0.90	300.19	3,798.3	25.5	9.4	20.15	27.2
3,900.0	0.77	287.28	3,898.3	26.1	8.1	17.12	27.3
4,000.0	0.74	290.10	3,998.3	26.6	6.8	14.37	27.4
4,100.0	0.66	284.91	4,098.3	26.9	5.6	11.83	27.5
4,200.0	0.73	283.09	4,198.3	27.2	4.5	9.31	27.6
4,300.0	0.41	280.92	4,298.3	27.4	3.5	7.25	27.7
4,400.0	0.37	261.68	4,398.3	27.5	2.8	5.87	27.6
4,500.0	0.42	261.38	4,498.3	27.3	2.1	4.47	27.4
4,600.0	0.44	239.92	4,598.3	27.1	1.4	3.05	27.1
4,700.0	0.54	244.32	4,698.3	26.7	0.7	1.47	26.7
4,800.0	0.51	258.76	4,798.3	26.4	-0.2	359.62	26.4
4,900.0	0.61	287.81	4,898.3	26.5	-1.1	357.58	26.5
5,000.0	0.69	294.98	4,998.2	26.9	-2.2	355.39	27.0
5,100.0	1.11	301.62	5,098.2	27.7	-3.5	352.71	27.9
5,200.0	1.36	304.77	5,198.2	28.9	-5.3	349.51	29.3
5,300.0	1.74	305.18	5,298.2	30.4	-7.6	346.04	31.3
5,400.0	2.09	306.13	5,398.1	32.4	-10.3	342.39	33.9
5,500.0	2.27	305.00	5,498.0	34.6	-13.4	338.86	37.1

Scientific Drilling International, Inc.

SDI Standard Survey Report

Company: COG OPERATING
Project: Lusk
Site: Lea County, NM
Well: Citation X Federal Com #1H
Wellbore: VH - Job #32K1210981
Design: VH - Job #32K1210981

Local Co-ordinate Reference: Well Citation X Federal Com #1H
TVD Reference: WELL @ 0.0usft (Original Well Elev)
MD Reference: WELL @ 0.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM-Regulatory

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
5,600.0	2.31	305.15	5,598.0	36.9	-16.6	335.71	40.4
5,700.0	2.20	300.79	5,697.9	39.0	-19.9	332.93	43.8
5,800.0	2.18	296.78	5,797.8	40.8	-23.3	330.32	47.0
5,900.0	2.27	293.29	5,897.7	42.5	-26.8	327.76	50.2
6,000.0	2.40	291.84	5,997.7	44.0	-30.6	325.25	53.6
6,100.0	2.34	293.08	6,097.6	45.6	-34.4	323.00	57.1
6,200.0	2.19	292.28	6,197.5	47.2	-38.0	321.11	60.6
6,300.0	2.31	290.72	6,297.4	48.6	-41.7	319.38	64.0
6,400.0	2.16	290.29	6,397.3	50.0	-45.3	317.78	67.5
6,500.0	1.75	293.18	6,497.3	51.2	-48.5	316.55	70.5
6,600.0	1.62	294.03	6,597.2	52.4	-51.2	315.66	73.2
6,700.0	1.47	293.36	6,697.2	53.5	-53.7	314.90	75.8
6,800.0	1.35	291.53	6,797.2	54.4	-55.9	314.21	78.0
6,900.0	1.04	309.96	6,897.2	55.4	-57.7	313.83	80.0
7,000.0	1.25	313.48	6,997.1	56.8	-59.2	313.79	82.0
7,100.0	0.73	346.17	7,097.1	58.1	-60.2	314.02	83.7
7,200.0	1.23	40.12	7,197.1	59.6	-59.6	314.97	84.3
7,300.0	1.78	42.40	7,297.1	61.5	-57.9	316.75	84.5
7,400.0	1.82	45.50	7,397.0	63.8	-55.7	318.87	84.7
7,500.0	1.64	40.35	7,497.0	66.0	-53.6	320.90	85.1
7,600.0	1.51	56.17	7,596.9	67.8	-51.6	322.72	85.2
7,700.0	1.87	56.12	7,696.9	69.5	-49.2	324.71	85.1
7,800.0	2.12	78.37	7,796.8	70.7	-46.0	326.96	84.4
7,864.0	1.86	74.48	7,860.8	71.3	-43.8	328.40	83.7



Scientific Drilling
Directional Drilling Operations

Project: Lusk
Lea County, NM
Well: Citation X Federal Com #1H
Wellbore: VH - Job #32K1210981
Design: VH - Job #32K1210981

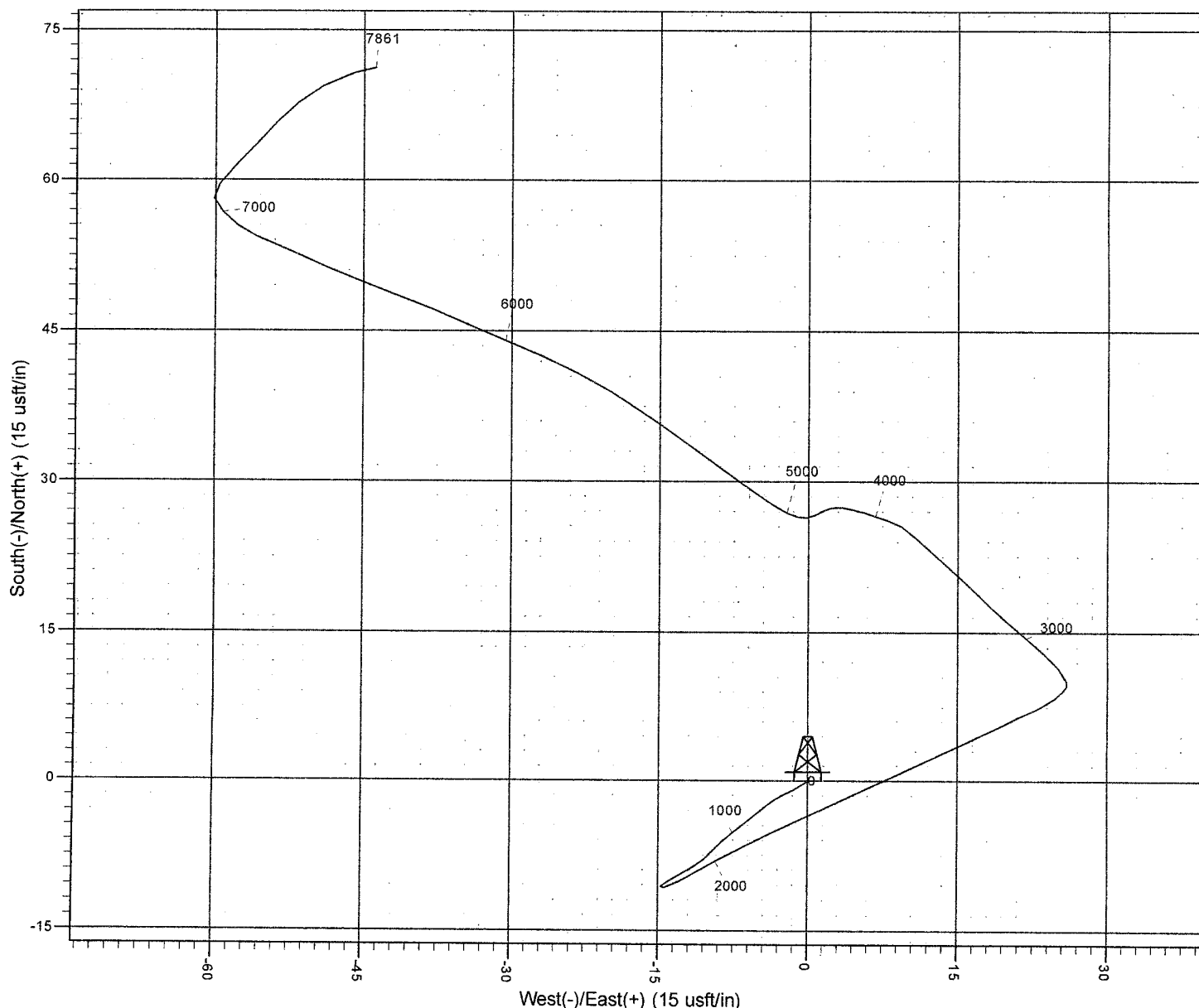


Azimuths to Grid North
True North: -0.30°
Magnetic North: 7.54°

Magnetic Field
Strength: 48976.8nT
Dip Angle: 60.59°
Date: 12/10/2010
Model: BGGM2010

WELL DETAILS: Citation X Federal Com #1H
WELL @ 0.0usft (Original Well Elev)
Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	608010.37	668500.03	32° 40' 13.174 N	103° 47' 8.729 W	



PROJECT DETAILS: Lusk
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

SITE DETAILS: Lea County, NM
Site Centre Latitude: 32° 40' 13.174 N
Longitude: 103° 47' 8.729 W
Positional Uncertainty: 0.0
Convergence: 0.30
Local North: Grid



DIRECTIONAL REPORT

WELLNAME: CITATION X FEDERAL COM #1H

FIELD: LUSK

WELL ID NO.: 30-025-39960

AFE NO.:

API NO.: 30-025-39960

SURVEY TYPE: GSS-0

MD: 7.864

ANGLE: 1.86

AZIMUTH: 74.48

TVD: 7.861

N/S: 71.29

E/W: -43.84

VS: -71.59

TARGET: 8510.00

MEASURED DEPTH	INCLINATION ANGLE	AZIMUTH ANGLE	TVD	+NORTH -SOUTH	+EAST -WEST	VERTICAL SECTION	DOGLEG SEVERITY
100	0.00	0.00					
200	0.38	235.88					
300	0.40	238.35					
400	0.37	244.85					
500	0.32	241.59					
600	0.44	244.23					
700	0.52	237.56					
800	0.63	230.72					
900	0.87	231.83					
1,000	0.87	229.58					
1,100	0.97	233.20					
1,200	0.68	225.94					
1,300	0.68	222.62					
1,400	0.77	229.45					
1,500	0.92	239.73					
1,600	0.87	239.36					
1,700	0.68	238.86					
1,800	0.20	211.99					
1,900	0.51	83.30					
2,000	1.47	61.35					
2,100	3.13	59.90					
2,200	3.83	65.33					
2,300	3.91	64.80					
2,400	3.91	65.41					
2,500	3.79	63.85					
2,600	3.66	64.89					
2,700	2.06	55.58					
2,800	0.84	338.56					
2,900	1.02	318.93					
3,000	1.31	312.28					
3,100	1.34	310.45					
3,200	1.40	309.28					
3,300	1.12	313.72					
3,400	1.05	314.02					
3,500	1.25	311.80					
3,600	1.24	312.86					
3,700	1.19	311.59					
3,800	1.22	312.85					
3,900	0.90	300.19					
4,000	0.77	287.28					
4,100	0.74	290.10					
4,200	0.66	284.91					
4,300	0.73	283.09					
4,400	0.41	280.92					
4,500	0.37	261.68					
4,600	0.42	261.38					
4,700	0.44	239.92					
4,800	0.54	244.32					
4,900	0.51	258.76					
5,000	0.61	287.81					
5,100	0.69	294.98					
5,200	1.11	301.62					
5,300	1.36	304.77					
5,400	1.74	305.18					
5,500	2.09	306.13					
5,600	2.27	305.00					
5,700	2.31	305.15					
5,800	2.20	300.79					
5,900	2.18	296.78					
6,000	2.27	293.29					
6,100	2.40	291.84					
6,200	2.34	293.08					
6,300	2.19	292.28					
6,400	2.31	290.72					
6,500	2.16	290.29					
6,600	1.75	293.18					
6,700	1.62	294.03					
6,800	1.47	293.36					
6,900	1.35	291.53					
7,000	1.04	309.96					
7,100	1.25	313.48					
7,200	0.73	346.17					



DIRECTIONAL REPORT

WELLNAME: CITATION X FEDERAL COM #1H

FIELD: LUSK

AFE NO.:

WELL ID NO.: 30-025-39960

API NO.: 30-025-39960

SURVEY TYPE: GSS-0

MD: 7.864

ANGLE: 1.86

AZIMUTH: 74.48

TVD: 7.861

N/S: 71.29

E/W: -43.84

VS: -71.59

TARGET: 8510.00

MEASURED DEPTH	INCLINATION ANGLE	AZIMUTH ANGLE	TVD	+NORTH -SOUTH	+EAST -WEST	VERTICAL SECTION	DOGLEG SEVERITY
7,200	1.23	40.12					
7,300	1.78	42.40					
7,400	1.82	45.50					
7,500	1.64	40.35					
7,600	1.51	56.17					
7,700	1.87	56.12					
7,800	2.12	78.37					
7,864	1.86	74.48	7,861	71.29	-43.84	-53.80	0.00
7,958	1.85	58.95	7,955	72.48	-41.07	-15.13	0.53
7,981	1.85	61.37	7,978	72.85	-40.43	-15.86	0.34
8,012	1.41	78.05	8,009	73.17	-39.61	-16.69	2.07
8,044	3.17	156.87	8,041	72.44	-38.88	-16.78	10.03
8,076	7.47	169.40	8,073	69.58	-38.15	-15.50	13.84
8,107	11.61	167.24	8,103	64.55	-37.09	-13.08	13.40
8,139	15.83	165.53	8,134	57.18	-35.29	-9.72	13.25
8,171	19.87	168.66	8,165	47.62	-33.13	-5.23	12.97
8,203	24.27	171.62	8,194	35.77	-31.10	0.83	14.18
8,235	28.84	175.00	8,223	21.57	-29.47	8.71	15.04
8,266	33.15	178.83	8,249	5.64	-28.64	18.32	15.28
8,299	37.02	179.31	8,276	-13.32	-28.34	30.27	11.76
8,330	39.57	178.24	8,301	-32.53	-27.92	42.30	8.50
8,361	42.74	176.75	8,324	-52.90	-27.02	54.70	10.70
8,393	46.08	174.45	8,347	-75.22	-25.29	67.73	11.59
8,425	48.01	174.17	8,369	-98.53	-22.97	80.93	6.07
8,456	50.74	173.88	8,389	-121.93	-20.52	94.09	8.84
8,488	54.17	173.65	8,408	-147.14	-17.76	108.19	10.73
8,520	57.07	174.67	8,427	-173.41	-15.08	123.02	9.44
8,552	59.71	175.18	8,443	-200.56	-12.67	138.62	8.36
8,584	63.58	175.06	8,459	-228.61	-10.27	154.82	12.10
8,615	68.15	176.35	8,471	-256.81	-8.16	171.33	15.22
8,647	72.98	178.06	8,482	-286.94	-6.70	189.57	15.91
8,679	76.15	179.26	8,490	-317.78	-5.98	208.84	10.54
8,711	78.70	180.32	8,497	-349.01	-5.87	228.83	8.60
8,742	82.31	181.32	8,502	-379.57	-6.30	248.81	12.07
8,764	84.42	181.18	8,505	-401.42	-6.78	263.22	9.61
8,796	86.17	186.26	8,508	-433.23	-8.85	285.26	16.74
8,828	88.11	182.78	8,509	-465.09	-11.37	307.66	12.44
8,892	90.75	181.57	8,510	-529.03	-13.80	350.62	4.54
8,955	90.31	181.15	8,509	-592.01	-15.29	392.25	0.96
9,019	90.13	181.06	8,509	-656.00	-16.53	434.33	0.31
9,082	89.78	181.27	8,509	-718.98	-17.81	475.80	0.65
9,146	89.34	180.93	8,510	-782.97	-19.04	517.87	0.87
9,209	89.60	181.54	8,510	-845.95	-20.39	559.39	1.05
9,272	89.52	181.43	8,511	-908.93	-22.03	601.12	0.22
9,335	90.13	181.14	8,511	-971.91	-23.44	642.69	1.07
9,398	89.87	180.34	8,511	-1034.91	-24.25	683.80	1.33
9,461	90.04	180.53	8,511	-1097.90	-24.73	724.66	0.41
9,525	90.13	180.53	8,511	-1161.90	-25.32	766.25	0.14
9,589	90.22	179.29	8,511	-1225.90	-25.22	807.32	1.94
9,651	89.87	178.20	8,511	-1287.88	-23.86	846.12	1.85
9,714	90.04	177.57	8,511	-1350.84	-21.54	884.80	1.04
9,778	90.92	177.46	8,510	-1414.78	-18.77	923.78	1.39
9,841	90.40	178.52	8,509	-1477.73	-16.55	962.55	1.87
9,904	89.78	178.48	8,509	-1540.71	-14.91	1001.77	0.99
9,966	89.08	179.06	8,510	-1602.69	-13.57	1040.59	1.47
10,030	89.08	179.59	8,511	-1666.68	-12.82	1081.14	0.83
10,093	89.25	180.06	8,512	-1729.67	-12.63	1121.49	0.79
10,157	89.52	179.48	8,512	-1793.67	-12.37	1162.43	1.00
10,221	89.78	179.99	8,513	-1857.67	-12.08	1203.34	0.89
10,284	89.78	179.03	8,513	-1920.66	-11.54	1243.42	1.52
10,347	90.84	179.96	8,513	-1983.66	-10.98	1283.48	2.24
10,412	90.84	179.31	8,512	-2048.65	-10.57	1324.94	1.00
10,474	91.36	180.12	8,511	-2110.64	-10.26	1364.55	1.55
10,536	90.57	180.52	8,510	-2172.63	-10.61	1404.66	1.43
10,597	89.16	180.52	8,510	-2233.62	-11.16	1444.29	2.31
10,659	88.37	180.48	8,511	-2295.61	-11.70	1484.55	1.28
10,720	88.20	180.74	8,513	-2356.57	-12.35	1524.24	0.51
10,783	88.64	179.94	8,515	-2419.55	-12.72	1565.00	1.45
10,845	88.46	179.93	8,516	-2481.53	-12.65	1604.79	0.29
10,906	90.48	180.74	8,517	-2542.52	-13.01	1644.27	3.57
10,968	90.66	181.46	8,516	-2604.51	-14.20	1685.02	1.20
11,030	90.22	181.96	8,516	-2666.48	-16.05	1726.27	1.07



DIRECTIONAL REPORT

WELLNAME: CITATION X FEDERAL COM #1H

FIELD: LUSK

WELL ID NO.: 30-025-39960

AFE NO.:

API NO.: 30-025-39960

SURVEY TYPE: GSS-0

MD: 7.864

ANGLE: 1.86

AZIMUTH: 74.48

TVD: 7.861

N/S: 71.29

E/W: -43.84

VS: -71.59

TARGET: 8510.00

MEASURED DEPTH	INCLINATION ANGLE	AZIMUTH ANGLE	TVD	+NORTH -SOUTH	+EAST -WEST	VERTICAL SECTION	DOGLEG SEVERITY
11,092	89.69	180.09	8,516	-2728.46	-17.16	1766.97	3.13
11,153	88.90	178.76	8,516	-2789.45	-16.55	1805.70	2.54
11,215	89.69	179.06	8,517	-2851.44	-15.37	1844.64	1.36
11,277	90.13	179.71	8,517	-2913.43	-14.70	1883.98	1.27
11,338	91.19	180.15	8,517	-2974.43	-14.63	1923.13	1.88
11,400	91.19	180.11	8,515	-3036.41	-14.77	1963.08	0.07
11,462	90.92	179.63	8,514	-3098.40	-14.63	2002.82	0.89
11,523	91.40	179.30	8,513	-3159.39	-14.06	2041.59	0.95
11,585	91.28	179.87	8,511	-3221.37	-13.61	2081.08	0.94
11,647	90.22	179.68	8,511	-3283.36	-13.37	2120.74	1.74
11,708	90.31	179.50	8,510	-3344.36	-12.93	2159.62	0.33
11,770	89.97	179.61	8,510	-3406.36	-12.45	2199.10	0.58
11,832	88.72	179.41	8,511	-3468.35	-11.92	2238.54	2.04
11,893	87.85	179.25	8,513	-3529.32	-11.20	2277.18	1.45
11,955	86.97	179.01	8,516	-3591.25	-10.26	2316.27	1.47
12,018	88.02	179.89	8,518	-3654.18	-9.66	2356.26	2.17
12,080	87.85	180.28	8,521	-3716.14	-9.75	2396.16	0.69
12,141	87.67	179.81	8,523	-3777.10	-9.80	2435.38	0.82
12,203	89.69	180.68	8,524	-3839.07	-10.06	2475.42	3.55
12,238	91.01	180.59	8,524	-3874.07	-10.45	2498.21	3.78
12,266	90.75	180.85	8,524	-3902.07	-10.80	2516.48	1.31
12,389	91.10	180.15	8,522	-4025.04	-11.88	2596.35	0.64
12,451	91.63	179.89	8,520	-4087.03	-11.90	2636.21	0.95
12,513	90.75	179.99	8,519	-4149.01	-11.84	2676.00	1.43
12,574	91.28	180.94	8,518	-4210.00	-12.33	2715.58	1.78
12,636	90.40	180.77	8,517	-4271.99	-13.26	2756.13	1.45
12,698	88.55	181.02	8,518	-4333.97	-14.22	2796.72	3.01
12,760	90.22	182.14	8,518	-4395.94	-15.93	2837.86	3.24
12,821	88.72	181.69	8,519	-4456.90	-17.97	2878.61	2.57
12,883	89.69	181.84	8,520	-4518.87	-19.88	2919.90	1.58
12,914	89.60	181.90	8,520	-4549.85	-20.89	2940.59	0.35
12,929	89.43	181.43	8,520	-4564.84	-21.33	2950.56	3.33