Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

JAN 29 2009

Form C-103
May 27, 2004

WELL API NO.	30-005-29019
5. Indicate Type of Lease	STATE ☒ FEE ☐
6. State Oil & Gas Lease No.	

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐	7. Lease Name or Unit Agreement Name: Saratoga 30 State Com
	8. Well Number: 001
2. Name of Operator: Cimarex Energy Co. of Colorado	9. OGRID Number: 162683
3. Address of Operator: 5215 N. O'Connor Blvd ste 1500 Irving TX 75039	10. Pool name or Wildcat: Abo; Wildcat

4. Well Location
SHL Unit Letter E : 1980 feet from the North line and 990 feet from the West line
SHL Unit Letter H : 1987 feet from the North line and 534 feet from the East line
Section 30 Township 15S Range 31E NMPM County Chaves

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
4450' GR

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type_____ Depth to Groundwater_____ Distance from nearest fresh water well_____ Distance from nearest surface water_____

Pit Liner Thickness:_____ Below-Grade Tank: Volume_____ bbls; Construction Material_____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☒		
OTHER:			☐	OTHER:			☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

09-14-08	TD'd 8 ¾" Pilot Hole @ 9222'
09-17-08	In 8 ¾" hole ran 7" 26# P-110 LTC to 9222'.
09-18-08	Cement lead with 475 sx Econo H + 7% HR7 + 1lb Pheno seal (wt 11.5, yield 2.77) Tail w/300 sx Versacem + .5% Halad 344 + .4% CFR + 1lb salt + 3 lb Pheno seal + .35% HR-7 (wt 13.2, yield 1.62). WOC 40 hrs. Est. TOC 3450.
09-19-08	Pressure test casing to 1000 psi for 30 minutes. Set bridge plug @ 8485'.
09-20-08	Cut Window for lateral top 8471' bottom 8484'.
10-06-08	TD'd 6 1/8" Horizontal TMD @ 12275'.
10-09-08	Set 4 ½" Peak assembly Top 8364' bottom 12275'.
10-10-08	Released Rig.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.**

SIGNATURE Scott Haynes TITLE Regulatory Analyst DATE January 28, 2009

Type or print name Scott Haynes email address: shaynes@cimarex.com Telephone No. 469-420-2715

For State Use Only

APPROVED BY: TITLE PETROLEUM ENGINEER DATE FEB 11 2009
Conditions of Approval (if any):

Results of Directional Survey

API number:	30-005-29019		
OGRID:		Operator:	CIMAREX ENERGY CO OF COLORADO
		Property:	SARATOGA 30 STATE COM # 1

surface	ULSTR:	E	30	T	15S	R	31E
			1980	FNL	990	FWL	
BH Loc	ULSTR:	H	30	T	15S	R	31E
			1973	FNL	4729	FWL	

	MD	N/S	E/W	VD
	9470	52.64	937.26	8723.07
TOP PERFS/OH	**9492**	50.82	959.14	8724.42
	9502	49.99	969.09	8725.04
	11603	17.93	3067.51	8737.31
BOT PERFS/OH	**11603**	17.93	3067.51	8737.31
	11634	17.43	3098.50	8736.94

NEXT TO LAST	12175	8.45	3639.33	8735.41
LAST READING	12207	7.97	3671.32	8736.11
TD	**12275**	6.95	3739.30	8737.60

Surface Location	1980	FN	990	FW
Projected BHL	1973	FN	4729	FW
Location of				
Top Perfs/OH	1929	FN	1949	FW
Bottom Perfs/OH	1962	FN	4058	FW

SUMMARY of Subsurface Locations

Surface Location	E-30-15S-31E	1980	FN	990	FW	Vert. Depth
Top Perfs/OH	E-30-15S-31E	1929	FN	1949	FW	8724.42
Bottom Perfs/OH	H-30-15S-31E	1962	FN	4058	FW	8737.31
Projected TD	H-30-15S-31E	1973	FN	4729	FW	8737.60

Scientific Drilling

SUR: E-30-15s-31e, 1980/N & 990/W
BHL: H-30-15s-31e, 1973/N & 4729/W
API # 30-005-29019

CIMAREX ENERGY

Field: Abo
Site: Chaves County, NM
Well: Saratoga 30 State Com #1
Wellpath: VH - Job #32K0908717
Survey: 09/15/08

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

.....Company Representative

Notorized this date 14th of October, 2008.

Notary Signature
County of Midland
State of Texas

NOTARY PUBLIC STATE OF TEXAS
CARRIE REED
My Commission Expires
October 4, 2011

Scientific Drilling

Scientific Drilling International
Survey Report

Company:	CIMAREX ENERGY	**Date:**	10/13/2008	**Time:**	10:43:20 **Page:** 1
Field:	Abo	**Co-ordinate(NE) Reference:**	Site: Chaves County, NM, Grid North		
Site:	Chaves County, NM	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	Saratoga 30 State Com #1	**Section (VS) Reference:**	Well (0.00N,0.00E,55.58Azi)		
Wellpath:	VH - Job #32K0908717	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey:	09/15/08 KSRG 0'-9147'	**Start Date:**	09/15/2008
Company:	Scientific Drilling Internatio	**Engineer:**	Guebara/Williams w/GeoGyro
Tool:	Keeper;Keeper Gyro	**Tied-to:**	From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	358.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.48	329.40	100.00	0.03	0.36	-0.21	0.48	0.42	329.40
200.00	0.53	102.47	200.00	0.37	0.62	0.03	0.93	0.62	2.32
300.00	0.51	108.56	299.99	0.96	0.38	0.90	0.06	0.98	67.10
400.00	0.55	97.41	399.99	1.58	0.18	1.80	0.11	1.81	84.40
500.00	0.52	101.40	499.98	2.26	0.02	2.72	0.05	2.72	89.48
600.00	0.46	97.68	599.98	2.87	-0.12	3.56	0.07	3.56	91.91
700.00	0.44	98.66	699.98	3.45	-0.23	4.34	0.02	4.34	93.04
800.00	0.45	98.69	799.97	4.01	-0.35	5.11	0.01	5.12	93.89
900.00	0.37	99.89	899.97	4.53	-0.46	5.81	0.08	5.83	94.55
1000.00	0.36	114.80	999.97	4.92	-0.65	6.41	0.10	6.45	95.78
1100.00	0.35	133.24	1099.97	5.15	-0.99	6.92	0.11	6.99	98.14
1200.00	0.39	131.62	1199.97	5.30	-1.43	7.40	0.04	7.54	100.91
1300.00	0.42	133.43	1299.96	5.46	-1.90	7.92	0.03	8.15	103.52
1400.00	0.34	107.34	1399.96	5.72	-2.24	8.47	0.19	8.76	104.84
1500.00	0.35	104.03	1499.96	6.10	-2.41	9.05	0.02	9.36	104.89
1600.00	0.55	91.00	1599.96	6.70	-2.49	9.83	0.22	10.14	104.22
1700.00	0.51	89.11	1699.95	7.46	-2.49	10.75	0.04	11.03	103.04
1800.00	1.16	86.04	1799.94	8.70	-2.41	12.20	0.65	12.44	101.19
1900.00	1.24	84.71	1899.92	10.52	-2.24	14.29	0.08	14.47	98.92
2000.00	1.54	86.04	1999.89	12.62	-2.05	16.71	0.30	16.84	97.00
2100.00	1.58	86.17	2099.85	14.97	-1.87	19.43	0.04	19.52	95.49
2200.00	1.58	83.78	2199.81	17.37	-1.63	22.17	0.07	22.23	94.19
2300.00	1.19	90.87	2299.79	19.43	-1.49	24.58	0.43	24.63	93.47
2400.00	0.93	88.14	2399.77	20.97	-1.48	26.43	0.26	26.47	93.21
2500.00	0.64	77.98	2499.76	22.17	-1.34	27.79	0.32	27.82	92.76
2600.00	0.51	77.45	2599.75	23.10	-1.13	28.77	0.13	28.79	92.24
2700.00	0.33	64.60	2699.75	23.79	-0.91	29.46	0.20	29.48	91.76
2800.00	0.19	347.96	2799.75	24.14	-0.62	29.69	0.34	29.69	91.20
2900.00	0.20	332.82	2899.75	24.23	-0.30	29.57	0.05	29.58	90.58
3000.00	0.26	357.39	2999.75	24.37	0.08	29.48	0.11	29.48	89.84
3100.00	0.26	327.51	3099.75	24.49	0.50	29.35	0.13	29.36	89.03
3200.00	0.27	314.16	3199.75	24.46	0.85	29.06	0.06	29.07	88.32
3300.00	0.33	325.06	3299.75	24.41	1.25	28.73	0.08	28.75	87.50
3400.00	0.35	311.78	3399.74	24.33	1.69	28.33	0.08	28.38	86.58
3500.00	0.37	311.36	3499.74	24.18	2.11	27.86	0.02	27.94	85.67
3600.00	0.44	283.60	3599.74	23.84	2.41	27.25	0.21	27.36	84.94
3700.00	0.53	281.60	3699.74	23.26	2.60	26.42	0.09	26.55	84.39
3800.00	0.58	289.73	3799.73	22.65	2.86	25.49	0.09	25.65	83.60
3900.00	0.65	299.70	3899.73	22.10	3.31	24.52	0.13	24.75	82.31
4000.00	0.46	315.27	3999.72	21.78	3.88	23.75	0.24	24.06	80.72
4100.00	0.52	317.76	4099.72	21.65	4.50	23.16	0.06	23.59	79.00
4200.00	0.53	307.90	4199.71	21.45	5.12	22.49	0.09	23.07	77.17
4300.00	0.55	310.26	4299.71	21.18	5.71	21.76	0.03	22.50	75.29
4400.00	0.55	308.09	4399.70	20.91	6.32	21.02	0.02	21.95	73.26
4500.00	0.63	314.83	4499.70	20.66	7.00	20.25	0.11	21.43	70.92
4600.00	0.75	323.03	4599.69	20.53	7.92	19.46	0.16	21.01	67.87
4700.00	0.88	333.29	4699.68	20.60	9.12	18.73	0.19	20.83	64.02
4800.00	0.83	332.30	4799.67	20.79	10.45	18.04	0.05	20.85	59.92

Scientific Drilling

Scientific Drilling International
Survey Report

Company:	CIMAREX ENERGY	**Date:**	10/13/2008	**Time:**	10:43:20 **Page:** 2
Field:	Abo	**Co-ordinate(NE) Reference:**	Site: Chaves County, NM, Grid North		
Site:	Chaves County, NM	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	Saratoga 30 State Com #1	**Section (VS) Reference:**	Well (0.00N,0.00E,55.58Azi)		
Wellpath:	VH - Job #32K0908717	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
4900.00	0.86	333.43	4899.66	20.98	11.76	17.37	0.03	20.98	55.90
5000.00	1.42	354.92	4999.64	21.69	13.67	16.93	0.70	21.76	51.08
5100.00	1.20	355.82	5099.61	22.82	15.95	16.74	0.22	23.12	46.39
5200.00	1.05	7.38	5199.59	23.96	17.90	16.78	0.27	24.54	43.15
5300.00	0.75	357.52	5299.58	24.92	19.46	16.87	0.34	25.76	40.92
5400.00	0.70	350.14	5399.57	25.52	20.72	16.74	0.11	26.64	38.93
5500.00	0.66	342.02	5499.57	25.94	21.87	16.46	0.10	27.37	36.96
5600.00	0.73	339.77	5599.56	26.26	23.01	16.06	0.08	28.06	34.90
5700.00	0.70	346.55	5699.55	26.63	24.21	15.70	0.09	28.85	32.96
5800.00	0.65	351.42	5799.54	27.10	25.36	15.47	0.08	29.71	31.38
5900.00	0.60	16.57	5899.54	27.75	26.42	15.53	0.28	30.65	30.45
6000.00	0.55	357.51	5999.53	28.41	27.40	15.66	0.20	31.56	29.75
6100.00	0.59	356.34	6099.53	28.93	28.40	15.61	0.04	32.40	28.79
6200.00	0.69	354.27	6199.52	29.48	29.51	15.51	0.10	33.34	27.73
6300.00	0.57	354.08	6299.52	30.01	30.60	15.40	0.12	34.26	26.72
6400.00	0.64	6.99	6399.51	30.61	31.65	15.42	0.15	35.21	25.97
6500.00	0.66	332.73	6499.50	31.05	32.72	15.22	0.38	36.09	24.95
6600.00	0.93	320.57	6599.50	31.06	33.86	14.44	0.32	36.81	23.10
6700.00	0.86	322.77	6699.48	30.95	35.08	13.48	0.08	37.58	21.01
6800.00	0.84	320.72	6799.47	30.85	36.25	12.56	0.04	38.36	19.11
6900.00	0.84	322.28	6899.46	30.74	37.40	11.64	0.02	39.17	17.30
7000.00	0.80	314.29	6999.45	30.57	38.46	10.70	0.12	39.92	15.54
7100.00	0.80	320.13	7099.44	30.36	39.49	9.75	0.08	40.67	13.87
7200.00	0.79	323.93	7199.43	30.28	40.58	8.90	0.05	41.54	12.37
7300.00	0.82	350.11	7299.42	30.55	41.84	8.37	0.37	42.67	11.31
7400.00	1.06	46.47	7399.41	31.76	43.18	8.91	0.91	44.09	11.66
7500.00	1.37	50.24	7499.39	33.87	44.59	10.50	0.32	45.81	13.26
7600.00	1.52	67.81	7599.36	36.35	45.85	12.65	0.47	47.56	15.43
7700.00	1.63	72.03	7699.32	39.01	46.79	15.23	0.16	49.21	18.03
7800.00	1.55	81.52	7799.28	41.59	47.43	17.92	0.27	50.70	20.70
7900.00	2.38	88.60	7899.22	44.55	47.68	21.34	0.86	52.24	24.11
8000.00	2.46	92.26	7999.13	48.01	47.64	25.56	0.17	54.07	28.21
8100.00	2.68	90.87	8099.03	51.64	47.52	30.04	0.23	56.22	32.30
8200.00	3.24	87.53	8198.90	55.95	47.61	35.20	0.59	59.21	36.48
8300.00	3.52	86.42	8298.72	60.98	47.92	41.09	0.29	63.13	40.61
8400.00	3.38	83.96	8398.54	66.21	48.43	47.08	0.20	67.54	44.19
8500.00	2.91	82.27	8498.39	71.07	49.08	52.53	0.48	71.89	46.95
8600.00	2.64	81.61	8598.27	75.41	49.76	57.32	0.27	75.90	49.04
8700.00	2.41	84.57	8698.18	79.32	50.29	61.69	0.26	79.59	50.81
8800.00	2.26	81.80	8798.09	82.93	50.77	65.74	0.19	83.06	52.32
8900.00	2.03	76.64	8898.02	86.35	51.46	69.41	0.30	86.41	53.45
9000.00	2.34	81.42	8997.95	89.84	52.17	73.16	0.36	89.86	54.50
9100.00	1.47	73.50	9097.89	92.90	52.84	76.40	0.91	92.90	55.33
9147.00	1.51	76.09	9144.88	94.05	53.16	77.58	0.17	94.05	55.58

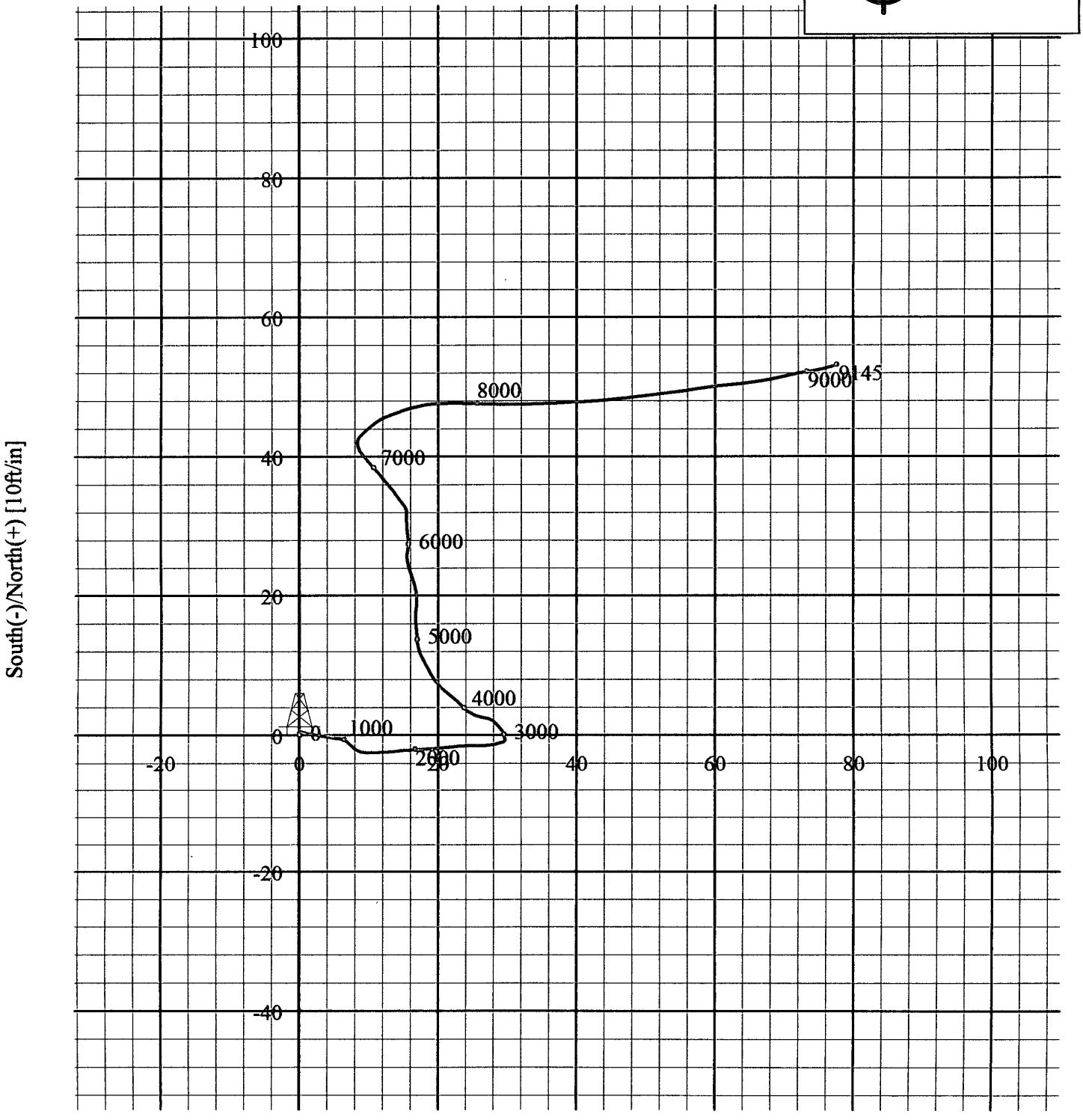
Scientific Drilling

Field: Abo
Site: Chaves County, NM
Well: Saratoga 30 State Com #1
Wellpath: VH - Job #32K0908717
Survey: 09/15/08

G/T/M

Azimuths to Grid North
True North: 0.00°
Magnetic North: 0.00°

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 10/13/2008
Model: igrf2000



South(-)/North(+) [10ft/in]

West(-)/East(+) [10ft/in]

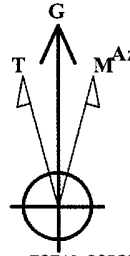
SARATOGA 30 STATE COM #1H
CHAVES CO., NEW MEXICO

CIMAREX

Weatherford

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	8471.47	3.04	82.81	8469.90	48.89	51.06	0.00	0.00	51.06	
2	8487.47	1.06	90.49	8485.89	48.94	51.63	12.50	175.94	51.63	
3	8492.47	1.06	90.49	8490.89	48.94	51.72	0.00	0.00	51.72	
4	8813.44	89.05	90.49	8696.00	47.17	257.22	27.41	0.00	257.22	
5	12498.97	89.05	90.49	8757.00	15.40	3942.10	0.00	0.00	3942.10	PBHL 8757' TVD



Azimuths to Grid North
True North: -0.25°
Magnetic North: 7.91°

Magnetic Field
Strength: 49367nT
Dip Angle: 60.92°
Date: 9/16/2008
Model: bggm2007

TOTAL CORRECTION TO GRID NORTH 7.91°

SITE DETAILS

Saratoga 30 State Com #1

Site Centre Northing: 723671.30
Easting: 643260.90

Ground Level: 4450.00
Positional Uncertainty: 0.00
Convergence: 0.25

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#1	0.00	0.00	723671.30	643260.90	32°59'18.841N	103°51'58.009W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL 8757' TVD	8757.00	15.40	3942.10	723686.70	647203.00	Point

FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	8585.00	8600.76	Lower Abo Dolomite
2	8675.00	8796.68	Wolfcamp LS

LEGEND

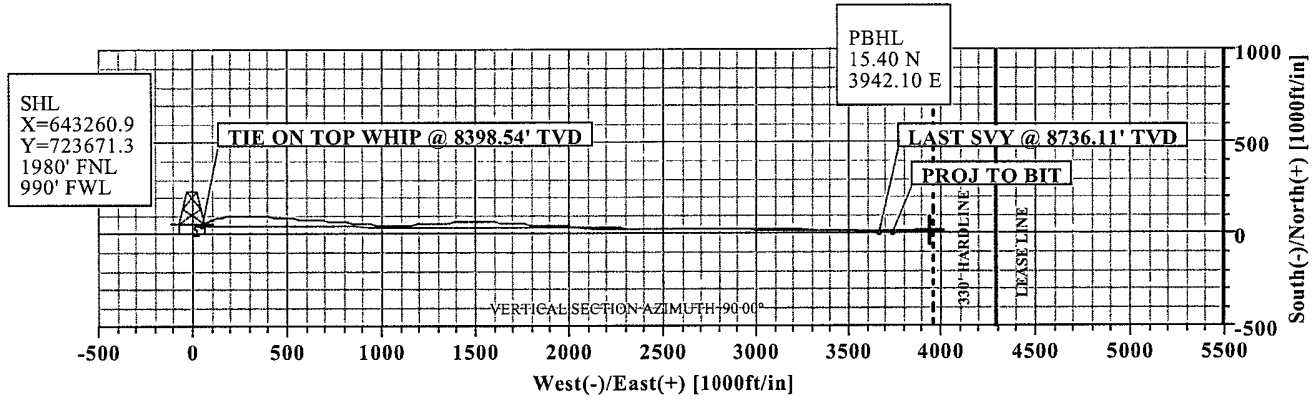
#1,1,Plan #3
WFT SVY

FIELD DETAILS

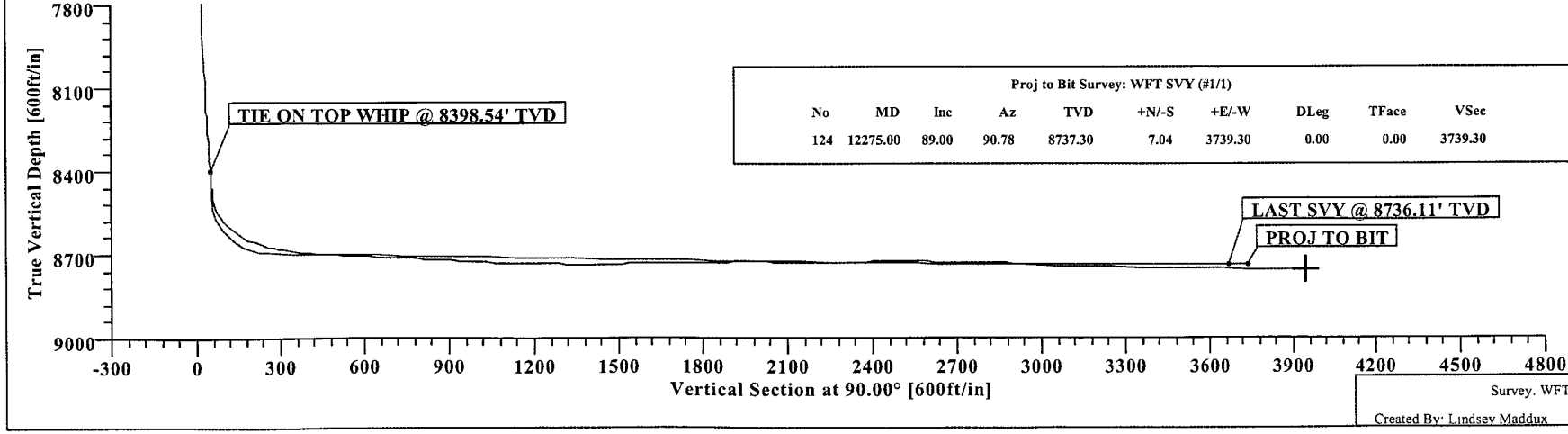
Chaves Co., NM (NAD 27)

Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: NAD27 (Clarke 1866)
Zone: New Mexico, Eastern Zone
Magnetic Model: bggm2007

System Datum: Mean Sea Level
Local North: Grid North



KB ELEV: 4475'
GL ELEV: 4450'



Proj to Bit Survey: WFT SVY (#1/1)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
124	12275.00	89.00	90.78	8737.30	7.04	3739.30	0.00	0.00	3739.30

Survey: WFT SVY (#1/1)
Created By: Lindsey Maddux Date: 10/6/2008

Weatherford International, Inc.
Survey Report

Weatherford

Company:	Cimarex	**Date:**	10/6/2008	**Time:**	08:48:20	**Page:**	1
Field:	Chaves Co., NM (NAD 27)	**Co-ordinate(NE) Reference:**	Well: #1, Grid North				
Site:	Saratoga 30 State Com #1	**Vertical (TVD) Reference:**	SITE 4475.0				
Well:	#1	**Section (VS) Reference:**	Well (0.00N,0.00E,90.00Azi)				
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase		

Field: Chaves Co., NM (NAD 27)

Map System:	US State Plane Coordinate System 1927	**Map Zone:**	New Mexico, Eastern Zone
Geo Datum:	NAD27 (Clarke 1866)	**Coordinate System:**	Well Centre
Sys Datum:	Mean Sea Level	**Geomagnetic Model:**	bggm2007

Site: Saratoga 30 State Com #1

Site Position:		**Northing:**	723671.30 ft	**Latitude:**	32 59 18.841 N
From:	Map	**Easting:**	643260.90 ft	**Longitude:**	103 51 58.009 W
Position Uncertainty:	0.00 ft			**North Reference:**	Grid
Ground Level:	4450.00 ft			**Grid Convergence:**	0.25 deg

Well: #1 **Slot Name:**

Well Position:	+N/-S	0.00 ft	**Northing:**	723671.30 ft	**Latitude:**	32 59 18.841 N
	+E/-W	0.00 ft	**Easting :**	643260.90 ft	**Longitude:**	103 51 58.009 W
Position Uncertainty:		0.00 ft				

Wellpath: 1

Drilled From:	Surface				
Tie-on Depth:	0.00 ft				
Current Datum:	SITE	**Height**	4475.00 ft	**Above System Datum:**	Mean Sea Level
Magnetic Data:	9/16/2008			**Declination:**	8.16 deg
Field Strength:	49367 nT			**Mag Dip Angle:**	60.92 deg

Vertical Section:	**Depth From (TVD)** ft	**+N/-S** ft	**+E/-W** ft	**Direction** deg
	0.00	0.00	0.00	90.00

Survey:	WFT SVY	**Start Date:**	9/24/2008
Company:	Weatherford International, Inc	**Engineer:**	Lindsey Maddux
Tool:	MWD;MWD - Standard	**Tied-to:**	From: GYRO SVY

Survey: WFT SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
8400.00	3.38	83.96	8398.54	48.43	47.08	47.08	0.00	0.00	0.00	TIE ON TOP WHIP @ 8398.54
8504.00	13.29	44.62	8501.37	57.28	58.56	58.56	10.47	9.53	-37.83	MWD
8547.00	28.05	67.21	8541.55	64.77	71.44	71.44	38.42	34.33	52.53	MWD
8571.00	35.59	66.09	8561.92	69.79	83.05	83.05	31.51	31.42	-4.67	MWD
8579.00	37.64	67.34	8568.35	71.68	87.43	87.43	27.27	25.62	15.62	MWD
8593.00	40.75	69.21	8579.19	74.95	95.65	95.65	23.76	22.21	13.36	MWD
8611.00	44.67	71.01	8592.42	79.09	107.13	107.13	22.81	21.78	10.00	MWD
8643.00	51.90	74.29	8613.70	86.17	129.92	129.92	23.85	22.59	10.25	MWD
8675.00	58.09	78.53	8632.06	92.29	155.38	155.38	22.17	19.34	13.25	MWD
8706.00	64.43	82.99	8646.96	96.62	182.19	182.19	24.02	20.45	14.39	MWD
8738.00	70.15	88.01	8659.31	98.91	211.60	211.60	22.99	17.87	15.69	MWD
8770.00	75.40	90.28	8668.79	99.36	242.15	242.15	17.75	16.41	7.09	MWD
8785.00	76.59	89.86	8672.42	99.34	256.70	256.70	8.39	7.93	-2.80	MWD
8802.00	78.47	90.92	8676.09	99.22	273.30	273.30	12.62	11.06	6.24	MWD
8823.00	79.34	91.92	8680.13	98.71	293.90	293.90	6.24	4.14	4.76	MWD
8834.00	79.57	92.07	8682.14	98.34	304.71	304.71	2.48	2.09	1.36	MWD
8866.00	81.89	92.31	8687.30	97.13	336.26	336.26	7.29	7.25	0.75	MWD
8898.00	82.86	93.19	8691.54	95.61	367.94	367.94	4.08	3.03	2.75	MWD
8929.00	83.09	92.97	8695.34	93.95	398.67	398.67	1.02	0.74	-0.71	MWD
8961.00	85.23	93.31	8698.59	92.21	430.45	430.45	6.77	6.69	1.06	MWD
8993.00	87.00	94.09	8700.76	90.15	462.31	462.31	6.04	5.53	2.44	MWD
9025.00	87.80	94.33	8702.21	87.80	494.19	494.19	2.61	2.50	0.75	MWD
9057.00	88.43	94.02	8703.26	85.48	526.09	526.09	2.19	1.97	-0.97	MWD
9089.00	87.17	94.53	8704.49	83.09	557.97	557.97	4.25	-3.94	1.59	MWD

Weatherford International, Inc.

Survey Report

Weatherford

Company:	Cimarex	**Date:**	10/6/2008	**Time:**	08:48:20	**Page:**	2
Field:	Chaves Co., NM (NAD 27)	**Co-ordinate(NE) Reference:**	Well: #1, Grid North				
Site:	Saratoga 30 State Com #1	**Vertical (TVD) Reference:**	SITE 4475.0				
Well:	#1	**Section (VS) Reference:**	Well (0.00N,0.00E,90.00Azi)				
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase		

Survey: WFT SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
9121.00	86.60	94.83	8706.23	80.48	589.82	589.82	2.01	-1.78	0.94	MWD
9152.00	86.78	93.37	8708.02	78.27	620.69	620.69	4.74	0.58	-4.71	MWD
9184.00	86.89	94.97	8709.79	75.95	652.55	652.55	5.00	0.34	5.00	MWD
9216.00	87.17	95.05	8711.45	73.16	684.39	684.39	0.91	0.87	0.25	MWD
9248.00	87.46	95.10	8712.95	70.33	716.23	716.23	0.92	0.91	0.16	MWD
9280.00	87.91	94.81	8714.24	67.57	748.08	748.08	1.67	1.41	-0.91	MWD
9311.00	88.03	94.06	8715.34	65.17	778.97	778.97	2.45	0.39	-2.42	MWD
9342.00	88.03	94.07	8716.40	62.98	809.87	809.87	0.03	0.00	0.03	MWD
9374.00	88.49	93.76	8717.37	60.79	841.78	841.78	1.73	1.44	-0.97	MWD
9406.00	86.71	95.30	8718.71	58.27	873.65	873.65	7.35	-5.56	4.81	MWD
9438.00	85.86	94.98	8720.79	55.41	905.46	905.46	2.84	-2.66	-1.00	MWD
9470.00	85.97	94.98	8723.07	52.64	937.26	937.26	0.34	0.34	0.00	MWD
9502.00	86.94	94.52	8725.04	49.99	969.09	969.09	3.35	3.03	-1.44	MWD
9533.00	88.43	92.07	8726.30	48.21	1000.01	1000.01	9.24	4.81	-7.90	MWD
9565.00	88.49	90.08	8727.16	47.61	1031.99	1031.99	6.22	0.19	-6.22	MWD
9597.00	87.57	88.50	8728.26	48.01	1063.96	1063.96	5.71	-2.87	-4.94	MWD
9629.00	87.69	87.97	8729.58	48.99	1095.92	1095.92	1.70	0.37	-1.66	MWD
9660.00	88.37	87.68	8730.65	50.17	1126.88	1126.88	2.38	2.19	-0.94	MWD
9692.00	89.34	87.17	8731.29	51.61	1158.84	1158.84	3.42	3.03	-1.59	MWD
9724.00	89.63	87.74	8731.57	53.03	1190.81	1190.81	2.00	0.91	1.78	MWD
9756.00	89.34	86.56	8731.86	54.62	1222.77	1222.77	3.80	-0.91	-3.69	MWD
9788.00	87.86	85.90	8732.64	56.72	1254.69	1254.69	5.06	-4.62	-2.06	MWD
9820.00	88.14	86.45	8733.76	58.85	1286.60	1286.60	1.93	0.87	1.72	MWD
9851.00	88.60	87.08	8734.64	60.60	1317.53	1317.53	2.52	1.48	2.03	MWD
9883.00	88.29	87.16	8735.51	62.21	1349.48	1349.48	1.00	-0.97	0.25	MWD
9914.00	89.40	88.49	8736.13	63.39	1380.45	1380.45	5.59	3.58	4.29	MWD
9946.00	89.86	90.07	8736.34	63.79	1412.45	1412.45	5.14	1.44	4.94	MWD
9978.00	90.83	90.47	8736.15	63.64	1444.45	1444.45	3.28	3.03	1.25	MWD
10010.00	90.88	89.57	8735.67	63.63	1476.44	1476.44	2.82	0.16	-2.81	MWD
10042.00	91.69	88.92	8734.95	64.05	1508.43	1508.43	3.25	2.53	-2.03	MWD
10074.00	92.20	88.64	8733.87	64.73	1540.41	1540.41	1.82	1.59	-0.87	MWD
10105.00	91.80	90.27	8732.79	65.02	1571.38	1571.38	5.41	-1.29	5.26	MWD
10137.00	90.66	92.48	8732.10	64.26	1603.37	1603.37	7.77	-3.56	6.91	MWD
10169.00	90.03	93.94	8731.91	62.46	1635.31	1635.31	4.97	-1.97	4.56	MWD
10201.00	89.74	94.34	8731.97	60.15	1667.23	1667.23	1.54	-0.91	1.25	MWD
10233.00	89.74	94.48	8732.12	57.69	1699.13	1699.13	0.44	0.00	0.44	MWD
10264.00	90.20	94.34	8732.13	55.31	1730.04	1730.04	1.55	1.48	-0.45	MWD
10296.00	90.54	94.06	8731.92	52.97	1761.96	1761.96	1.38	1.06	-0.87	MWD
10328.00	91.11	93.58	8731.46	50.83	1793.88	1793.88	2.33	1.78	-1.50	MWD
10360.00	91.63	93.37	8730.70	48.90	1825.81	1825.81	1.75	1.62	-0.66	MWD
10392.00	92.14	93.13	8729.65	47.08	1857.74	1857.74	1.76	1.59	-0.75	MWD
10423.00	93.06	92.75	8728.24	45.49	1888.67	1888.67	3.21	2.97	-1.23	MWD
10449.00	91.74	91.99	8727.15	44.42	1914.63	1914.63	5.86	-5.08	-2.92	MWD
10455.00	91.46	92.03	8726.98	44.21	1920.62	1920.62	4.71	-4.67	0.67	MWD
10487.00	89.23	91.63	8726.79	43.19	1952.60	1952.60	7.08	-6.97	-1.25	MWD
10519.00	88.88	91.70	8727.32	42.26	1984.58	1984.58	1.12	-1.09	0.22	MWD
10551.00	88.94	91.27	8727.93	41.43	2016.57	2016.57	1.36	0.19	-1.34	MWD
10582.00	89.34	90.85	8728.39	40.86	2047.56	2047.56	1.87	1.29	-1.35	MWD
10614.00	89.23	90.54	8728.79	40.47	2079.55	2079.55	1.03	-0.34	-0.97	MWD
10646.00	89.11	90.63	8729.26	40.14	2111.55	2111.55	0.47	-0.37	0.28	MWD
10678.00	89.06	90.43	8729.77	39.84	2143.54	2143.54	0.64	-0.16	-0.62	MWD
10710.00	87.52	93.46	8730.72	38.76	2175.50	2175.50	10.62	-4.81	9.47	MWD
10742.00	87.00	94.91	8732.25	36.43	2207.38	2207.38	4.81	-1.62	4.53	MWD

Weatherford International, Inc.

Survey Report

Weatherford

Company:	Cimarex	**Date:**	10/6/2008	**Time:**	08:48:20	**Page:**	3
Field:	Chaves Co., NM (NAD 27)	**Co-ordinate(NE) Reference:**	Well: #1, Grid: North				
Site:	Saratoga 30 State Com #1	**Vertical (TVD) Reference:**	SITE 4475.0				
Well:	#1	**Section (VS) Reference:**	Well (0.00N,0.00E,90.00Azi)				
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase		

Survey: WFT SVY

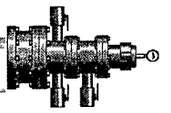
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
10774.00	89.00	94.29	8733.37	33.86	2239.26	2239.26	6.54	6.25	-1.94	MWD
10806.00	91.68	92.33	8733.18	32.02	2271.20	2271.20	10.38	8.37	-6.12	MWD
10838.00	92.83	91.27	8731.92	31.01	2303.16	2303.16	4.89	3.59	-3.31	MWD
10869.00	93.17	91.10	8730.30	30.37	2334.11	2334.11	1.23	1.10	-0.55	MWD
10901.00	92.37	90.58	8728.75	29.90	2366.07	2366.07	2.98	-2.50	-1.62	MWD
10933.00	92.71	90.47	8727.33	29.61	2398.03	2398.03	1.12	1.06	-0.34	MWD
10965.00	93.22	90.32	8725.68	29.39	2429.99	2429.99	1.66	1.59	-0.47	MWD
10997.00	91.40	90.70	8724.39	29.10	2461.96	2461.96	5.81	-5.69	1.19	MWD
11029.00	88.37	90.24	8724.45	28.84	2493.96	2493.96	9.58	-9.47	-1.44	MWD
11061.00	87.97	90.29	8725.47	28.69	2525.94	2525.94	1.26	-1.25	0.16	MWD
11093.00	88.15	90.49	8726.56	28.48	2557.92	2557.92	0.84	0.56	0.62	MWD
11124.00	88.03	90.33	8727.59	28.25	2588.90	2588.90	0.64	-0.39	-0.52	MWD
11156.00	88.26	90.15	8728.63	28.12	2620.89	2620.89	0.91	0.72	-0.56	MWD
11188.00	88.60	90.43	8729.50	27.96	2652.87	2652.87	1.38	1.06	0.87	MWD
11220.00	89.34	90.29	8730.08	27.76	2684.87	2684.87	2.35	2.31	-0.44	MWD
11252.00	90.03	90.60	8730.25	27.51	2716.87	2716.87	2.36	2.16	0.97	MWD
11284.00	90.66	90.50	8730.06	27.20	2748.86	2748.86	1.99	1.97	-0.31	MWD
11316.00	90.83	91.40	8729.64	26.67	2780.86	2780.86	2.86	0.53	2.81	MWD
11348.00	89.34	91.74	8729.60	25.79	2812.84	2812.84	4.78	-4.66	1.06	MWD
11379.00	86.77	91.54	8730.65	24.91	2843.81	2843.81	8.32	-8.29	-0.65	MWD
11411.00	86.20	91.41	8732.61	24.09	2875.74	2875.74	1.83	-1.78	-0.41	MWD
11443.00	86.66	91.44	8734.60	23.29	2907.67	2907.67	1.44	1.44	0.09	MWD
11475.00	87.40	91.34	8736.26	22.52	2939.61	2939.61	2.33	2.31	-0.31	MWD
11507.00	88.94	91.95	8737.28	21.60	2971.58	2971.58	5.18	4.81	1.91	MWD
11539.00	89.86	92.39	8737.62	20.39	3003.56	3003.56	3.19	2.87	1.37	MWD
11571.00	90.37	92.53	8737.55	19.01	3035.53	3035.53	1.65	1.59	0.44	MWD
11603.00	90.49	91.34	8737.31	17.93	3067.51	3067.51	3.74	0.37	-3.72	MWD
11634.00	90.89	90.53	8736.94	17.43	3098.50	3098.50	2.91	1.29	-2.61	MWD
11666.00	89.52	90.11	8736.83	17.25	3130.50	3130.50	4.48	-4.28	-1.31	MWD
11698.00	89.69	90.12	8737.05	17.18	3162.50	3162.50	0.53	0.53	0.03	MWD
11730.00	90.43	90.41	8737.01	17.04	3194.50	3194.50	2.48	2.31	0.91	MWD
11762.00	91.06	90.19	8736.60	16.87	3226.50	3226.50	2.09	1.97	-0.69	MWD
11794.00	91.86	90.47	8735.78	16.68	3258.48	3258.48	2.65	2.50	0.87	MWD
11826.00	90.71	90.68	8735.06	16.36	3290.47	3290.47	3.65	-3.59	0.66	MWD
11857.00	90.26	90.66	8734.80	16.00	3321.47	3321.47	1.45	-1.45	-0.06	MWD
11889.00	88.60	91.06	8735.12	15.52	3353.46	3353.46	5.34	-5.19	1.25	MWD
11921.00	88.72	91.16	8735.87	14.90	3385.45	3385.45	0.49	0.37	0.31	MWD
11953.00	89.52	91.24	8736.36	14.23	3417.44	3417.44	2.51	2.50	0.25	MWD
11985.00	90.09	91.40	8736.47	13.49	3449.43	3449.43	1.85	1.78	0.50	MWD
12017.00	90.88	91.01	8736.20	12.82	3481.42	3481.42	2.75	2.47	-1.22	MWD
12048.00	91.63	91.22	8735.52	12.22	3512.41	3512.41	2.51	2.42	0.68	MWD
12080.00	90.60	91.93	8734.90	11.34	3544.39	3544.39	3.91	-3.22	2.22	MWD
12112.00	90.60	92.46	8734.56	10.11	3576.36	3576.36	1.66	0.00	1.66	MWD
12144.00	88.89	91.30	8734.70	9.06	3608.34	3608.34	6.46	-5.34	-3.62	MWD
12175.00	88.49	90.96	8735.41	8.45	3639.33	3639.33	1.69	-1.29	-1.10	MWD
12207.00	89.00	90.78	8736.11	7.97	3671.32	3671.32	1.69	1.59	-0.56	LAST SVY @ 8736.11' TVD
12275.00	89.00	90.78	8737.30	7.04	3739.30	3739.30	0.00	0.00	0.00	PROJ TO BIT

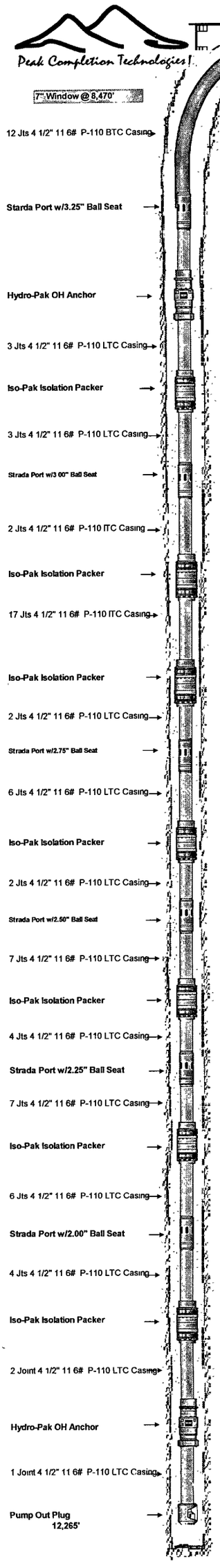
Annotation

MD ft	TVD ft	
8400.00	8398.54	TIE ON TOP WHIP @ 8398.54' TVD
12207.00	8736.11	LAST SVY @ 8736.11' TVD
12275.00	8737.30	PROJ TO BIT

Peak Completion Technologies

Peak RSD Liner Hanger Top @ 8,364 Ft.





DOWN HOLE WELL PROFILE

WELL NAME	Saratoga 30 State Com #1H	DATE	10/9/08
SUPERVISOR	Jeff LaJoie	TOOL HAND	R.BLANTON
PHONE #	575-390-4697	PHONE #	432-425-9679
RIG #	Cactus 107	FIELD TICKET #	10481

ELEVATIONS

KB	GL ELEV	KB TO THF	KB TO SCF	RIG KBD	TD
25					12275.00

CASING / OPEN HOLE LAYOU	OD (IN)	Total Depth	WEIGHT (LB/FT)	TOP OF (FTKB)
CASING DESCRIPTION	7	8470.00	26	
WINDOW DESCRIPTION				
OPEN HOLE DESCRIPTION	6 1/8	12275.00	Window @	8470.00

DESCRIPTION

Reach Setting Depth with Tight Spots From 10,480' to 11,130'

See Job Log for Setting Procedures

STEERING DIRECTIONS

DOWNHOLE DESCRIPTION FROM BOTTOM

BOTTOM @	DESCRIPTION	LENGTH	ID	OD
12275.00	TD	0.00		
12275.00	End of String (Off Bottom)	210.00		
12065.00	Peak 3 1/2" Open Hole Pump Out Plug w/External Float Check Valve & 3 1/2 Eue 8rd Inteergal Box Connection (1.00" Seat)	0.95	Float/.75	4.500
12064.05	4 1/2" LTC X 3 1/2" 8rd Crossover	1.00	3.000	4.500
12063.05	1 Joint 4 1/2" 11.60# P-110 LTC Casing (1)	43.24	4.000	4.500
12019.81	2' x 4 1/2" 11.6# P-110 LTC Pup Joint	2.09	4.000	4.500
12017.72	7 x 4 1/2 Peak Rotational Open Hole Centralizer (LTC)	0.58	4.000	5.875
12017.14	7 x 4 1/2 Peak Extreme Service Hydraulic Set Open Hole Anchor pull shear release (LTC)	4.27	4.000	5.875
12012.87	6' x 4 1/2" 11.6# P-110 LTC Pup Joint	6.06	4.000	4.500
12006.81	2 Joints 4 1/2" 11.6# P-110 LTC Casing (2-3)	86.43	4.000	4.500
11920.38	2' x 4 1/2" 11.6# P-110 LTC Pup Joint	2.09	4.000	4.500
11918.29	7 x 4 1/2 Peak Rotational Open Hole Centralizer (LTC)	0.58	4.000	5.875
11917.71	7 x 4 1/2 Peak Extreme Service Open Hole Hydraulic Set Isolation Packer (full hole) 10K w/HTHP elements pull shear release (LTC) #1	5.52	4.000	5.688
11912.19	6' x 4 1/2" 11.6# P-110 LTC Pup Joint	6.06	4.000	4.500
11906.13	4 Joints 4 1/2" 11.6# P-110 LTC Casing (4-7)	172.79	4.000	4.500
11733 34	7 x 4 1/2 Peak Strada PortSelective Sand Frac Sleeves w/2.00 Seat, Ball activated (LTC) #1	2.92	2.063	5.875
11730.42	6 Joints 4 1/2" 11.6# P-110 LTC Casing (8-13)	260.94	4.000	4.500
11469.48	2' x 4 1/2" 11.6# P-110 LTC Pup Joint	2.09	4.000	4.500
11467.39	7 x 4 1/2 Peak Rotational Open Hole Centralizer (LTC)	0.58	4.000	5.875
11466.81	7 x 4 1/2 Peak Extreme Service Open Hole Hydraulic Set Isolation Packer (full hole) 10K w/HTHP elements pull shear release (LTC) #2	5.52	4.000	5.688
11461.29	6' x 4 1/2" 11.6# P-110 LTC Pup Joint	6.06	4.000	4.500
11455.23	7 Joints 4 1/2" 11.6# P-110 LTC Casing (14-20)	302.21	4.000	4.500
11153.02	7 x 4 1/2 Peak Strada PortSelective Sand Frac Sleeves w/2.25 Seat, Ball activated (LTC) #2	2.92	2.313	5.875
11150.10	4 Joints 4 1/2" 11.6# P-110 LTC Casing (21-24)	173.47	4.000	4.500
10976.63	2' x 4 1/2" 11.6# P-110 LTC Pup Joint	2.09	4.000	4.500
10974.54	7 x 4 1/2 Peak Rotational Open Hole Centralizer (LTC)	0.58	4.000	5.875
10973.96	7 x 4 1/2 Peak Extreme Service Open Hole Hydraulic Set Isolation Packer (full hole) 10K w/HTHP elements pull shear release (LTC) #3	5.52	4.000	5.688
10968.44	6' x 4 1/2" 11.6# P-110 LTC Pup Joint	6.06	4.000	4.500
10962.38	7 Joints 4 1/2" 11.6# P-110 LTC Casing (25-31)	301.83	4.000	4.500
10660.55	7 x 4 1/2 Peak Strada PortSelective Sand Frac Sleeves w/2.50 Seat, Ball activated (LTC) #3	2.92	2.563	5.875
10657.63	2 Joints 4 1/2" 11.6# P-110 LTC Casing (32-33)	86.21	4.000	4.500
10571.42	2' x 4 1/2" 11.6# P-110 LTC Pup Joint	2.09	4.000	4.500
10569.33	7 x 4 1/2 Peak Rotational Open Hole Centralizer (LTC)	0.58	4.000	5.875
10568.75	7 x 4 1/2 Peak Extreme Service Open Hole Hydraulic Set Isolation Packer (full hole) 10K w/HTHP elements pull shear release (LTC) #4	5.52	4.000	5.688
10563.23	6' x 4 1/2" 11.6# P-110 LTC Pup Joint	6.06	4.000	4.500
10557.17	6 Joints 4 1/2" 11.6# P-110 LTC Casing (34-39)	258.37	4.000	4.500
10298.80	7 x 4 1/2 Peak Strada PortSelective Sand Frac Sleeves w/2.75 Seat, Ball activated (LTC) #4	2.92	2.813	5.875
10295.88	2 Joints 4 1/2" 11.6# P-110 LTC Casing (40-41)	86.62	4.000	4.500
10209.26	2' x 4 1/2" 11.6# P-110 LTC Pup Joint	2.09	4.000	4.500
10207.17	7 x 4 1/2 Peak Rotational Open Hole Centralizer (LTC)	0.58	4.000	5.875
10206.59	7 x 4 1/2 Peak Extreme Service Open Hole Hydraulic Set Isolation Packer (full hole) 10K w/HTHP elements pull shear release (LTC) #5	5.52	4.000	5.688
10201.07	6' x 4 1/2" 11.6# P-110 LTC Pup Joint	6.06	4.000	4.500
10195.01	17 Joints 4 1/2" 11.6# P-110 LTC Casing (42-58)	733.78	4.000	4.500
9461.23	2' x 4 1/2" 11.6# P-110 LTC Pup Joint	2.09	4.000	4.500
9459.14	7 x 4 1/2 Peak Rotational Open Hole Centralizer (LTC)	0.58	4.000	5.875
9458.56	7 x 4 1/2 Peak Extreme Service Open Hole Hydraulic Set Isolation Packer (full hole) 10K w/HTHP elements pull shear release (LTC) #6	5.52	4.000	5.688
9453.04	6' x 4 1/2" 11.6# P-110 LTC Pup Joint	6.06	4.000	4.500
9446.98	2 Joints 4 1/2" 11.6# P-110 LTC Casing (59-60)	86.02	4.000	4.500
9360.96	7 x 4 1/2 Peak Strada PortSelective Sand Frac Sleeves w/3.00 Seat, Ball activated (LTC) #5	2.92	3.063	5.875
9358.04	3 Joints 4 1/2" 11.6# P-110 LTC Casing (61-63)	130.10	4.000	4.500
9227.94	2' x 4 1/2" 11.6# P-110 LTC Pup Joint	2.09	4.000	4.500
9225.85	7 x 4 1/2 Peak Rotational Open Hole Centralizer (LTC)	0.58	4.000	5.875
9225.27	7 x 4 1/2 Peak Extreme Service Open Hole Hydraulic Set Isolation Packer (full hole) 10K w/HTHP elements pull shear release (LTC) #7	5.52	4.000	5.688
9219.75	6' x 4 1/2" 11.6# P-110 LTC Pup Joint	6.06	4.000	4.500
9213.69	3 Joints 4 1/2" 11.6# P-110 LTC Casing (64-66)	129.09	4.000	4.500
9084.60	2' x 4 1/2" 11.6# P-110 LTC Pup Joint	2.09	4.000	4.500
9082.51	7 x 4 1/2 Peak Rotational Open Hole Centralizer (LTC)	0.58	4.000	5.875
9081.93	7 x 4 1/2 Peak Extreme Service Hydraulic Set Open Hole Anchor pull shear release (LTC)	4.27	4.000	5.875
9077.66	6' x 4 1/2" 11.6# P-110 LTC Pup Joint	6.06	4.000	4.500
9071.60	3 Joints 4 1/2" 11.6# P-110 LTC Casing (67-69)	129.29	4.000	4.500
8942.31	7 x 4 1/2 Peak Strada PortSelective Sand Frac Sleeves w/3.25 Seat, Ball activated (LTC) #5	2.92	3.313	5.875
8939.39	4 1/2" 11.6# P-110 BTC Box x LTC Pin Crossover	32.70	4.000	4.500
8906.69	12 Joints 4 1/2" 11.6# P-110 BTC Casing (1-12)	535.76	4.000	4.500
8370.93	4 1/2" 11.6# P-110 LTC Box x BTC Pin Crossover	0.46	4.000	4.500
8370.47	4 1/2" 11.6# P-110 LTC Double Pin Crossover	1.48	4.000	4.500
8368.99	7 x 4" Peak Retrievable Seal Bore Packer 26# w/4" Seal Bore	5.48	4.000	5.875
8363.51	Top of Liner			

WEIGHT OF DP STRING	95K	TOTAL STRING LENGTH	12085.75
PUSH / PULL TEST	40K	STICK-UP OFF RIG FLOOR	20.75'
LINER STRING WEIGHT	35K	OFF BOTTOM	210.00

TOTAL MEASURED DEPTH @ 12,275 FT

***** CONFIDENTIAL *****

NOT TO BE DISCLOSED OUTSIDE

**** Cimarex Energy ****