

WELL LOGS

K Z

API number:	30-025-38690		
OGRID:		Operator:	CIMAREX ENERGY CO
		Property:	CAUDILL SOUTH 21 FEE # 3

surface	ULSTR:	J	21	T	15S	R	36E
			2000	FSL	2220	FEL	

BH Loc	ULSTR:	G	21	T	15S	R	36E
			3584	FSL	2209	FEL	

Ground Level:	3895	DF:	3915	KB:	3916	
Datum:	KB			TD:	10975	(Pilot hole)

Land:	FEE	Completion Date: (1)	6/17/2008	*** LATE ***
		Date Logs Received:	11/25/2008	
		Date Logs Due in: (2)	7/7/2008	

Confidential:	NO		Date out:	
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Confidential period: 90 Days for State & Fee, 1 Year for federal

Date Due In: (1) is equal to Completion Date (1) + 20 days

Logs	Depth interval		
TD LD CN/GR	4516	10922	Three Detector Litho-Density
HRLA	4516	10922	High Resolution Laterolog
BHC	4516	10948	Borehole Compensated Sonic
	4516	10948	Hostile Natural Gamma Ray Spectroscopy
CBL	4500	10842	Cement Bond Log

K Z

OCD TOPS

Rustler	2010	Strawn		
Tansill		Atoka		
Yates	3085	Morrow		
7 rvs	3278			
		Austin		
		Chester		
Queen	3978	Miss Lime		
Penrose				
Grayburg				
San Andres				
Glorieta				
Paddock				
Blinbry				
Tubb	7516			
Drinkard	7712			
Abo	8232			
Wolfcamp	9753			

Results of Directional Survey

API number:	30-025-38690		
OGRID:		Operator:	CIMAREX ENERGY CO
		Property:	CAUDILL SOUTH 21 FEE # 3

surface	ULSTR:	J	21	T	15S	R	36E
			2000	FSL	2220	FEL	

BH Loc	ULSTR:	G	21	T	15S	R	36E
			3584	FSL	2209	FEL	

	MD	N/S	E/W	VD
	10858	388.50	-60.22	10688.05
TOP PERFS/OH	10880	410.42	-58.32	10687.55
	10880	410.42	-58.32	10687.55
	11985	1512.35	6.80	10644.18
BOT PERFS/OH	12057	1584.17	11.08	10641.41
	12017	1544.27	8.70	10642.95

NEXT TO LAST	11985	1512.35	6.80	10644.18
LAST READING	12017	1544.27	8.70	10642.95
TD	12057	1584.17	11.08	10641.41

Surface Location	2000	FS	2220	FE
Projected BHL	3584	FS	2209	FE
Location of				
Top Perfs/OH	2410	FS	2278	FE
Bottom Perfs/OH	3584	FS	2209	FE

SUMMARY of Subsurface Locations

Surface Location	J-21-15S-36E	2000	FS	2220	FE	Vert. Depth
Top Perfs/OH	J-21-15S-36E	2410	FS	2278	FE	10687.55
Bottom Perfs/OH	G-21-15S-36E	3584	FS	2209	FE	10641.41
Projected TD	G-21-15S-36E	3584	FS	2209	FE	10641.41

OPERATOR: Cimarex Energy Co.
WELL/LEASE: Caudill South 21 Fee # 3-H
COUNTY: ~~Eddy~~ Co., NM Sec. 21, T15S, R36E
LEA

SUR: J-21-15s-36e, 2000/S & 2220/E
BHL: G-21-15s-36e, 3584/S & 2209/E
API #30-025-38690

STATE OF NEW MEXICO
DEVIATION REPORT

<u>Depth</u>	<u>Deviation</u>	<u>Depth</u>	<u>Deviation</u>
292	0	6,707	1 1/2
323	1 3/4	7,150	1 1/4
1,014	1 1/4	7,973	1 5/6
1,448	1	8,384	1 3/4
1,891	1/2	8,828	1 1/2
2,334	1/2	9,300	1 1/2
2,777	1/2	9,744	3 1/4
3,252	3/4	9,334	0
3,725	1	9,945	3
4,199	1/6	10,187	3
4,451	1/2	10,569	2
4,869	2		
4,900	1		
5,347	1 2/3		
5,790	1		
6,265	1 1/2		

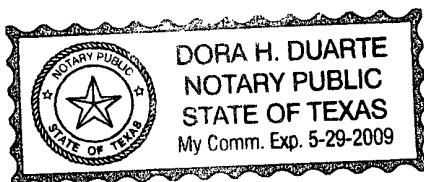
Patriot Drilling, LLC



M. Leroy Peterson, Executive Vice-
President

The foregoing instrument was acknowledged before me on this 3rd day of April,
2008 by M. Leroy Peterson, Executive Vice-President of Patriot Drilling, LLC.

My Commission Expires: 5/29/2009



Dora H. Duarte
Notary Public for Midland Co., Texas





Weatherford International Ltd.

SURVEY REPORT



Weatherford

Company: CIMAREX	Date: 10/1/2008	Time: 14:00:49	Page: 1
Field: Lea Co., NM (NAD 83)	Co-ordinate(NE) Reference: Site: Caudill South 21 Fee #3, True North		
Site: Caudill South 21 Fee #3	Vertical (TVD) Reference: SITE 3916.0		
Well: #3	Section (VS) Reference: Well (0.00N,0.00E,0.73Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: WFT SVY	Start Date: 5/20/2008
Company: Weatherford International, Inc	Engineer: Lindsey Maddux
Tool: MWD;MWD - Standard	Tied-to: From: SDI GYRO

Field: Lea Co., NM (NAD 83)

Map System: US State Plane Coordinate System 1983	Map Zone: New Mexico, Eastern Zone
Geo Datum: GRS 1980	Coordinate System: Site Centre
Sys Datum: Mean Sea Level	Geomagnetic Model: bggm2007

Site: Caudill South 21 Fee #3

2000' FSL 2220' FEL of SEC 21, T-15-S, R-36-E

Site Position:	Northing: 729526.40 ft	Latitude: 33 0 4.505 N
From: Map	Easting: 855805.70 ft	Longitude: 103 18 27.380 W
Position Uncertainty: 0.00 ft		North Reference: True
Ground Level: 3895.00 ft		Grid Convergence: 0.56 deg

Well: #3

Slot Name:

Well Position: +N/-S 0.00 ft	Northing: 729526.40 ft	Latitude: 33 0 4.505 N
+E/-W 0.00 ft	Easting: 855805.70 ft	Longitude: 103 18 27.380 W
Position Uncertainty: 0.00 ft		

Wellpath: 1

Current Datum: SITE	Height 3916.00 ft	Drilled From: Pilot
Magnetic Data: 4/4/2008		Tie-on Depth: 10439.00 ft
Field Strength: 49493 nT		Above System Datum: Mean Sea Level
Vertical Section: Depth From (TVD)	+N/-S	Declination: 7.95 deg
ft	ft	Mag Dip Angle: 61.05 deg
		+E/-W
		ft
		Direction
		deg
0.00	0.00	0.73

Survey

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	Comment
10400.00	2.22	335.42	10397.09	123.56	-88.68	122.42	0.00	0.00	0.00	TIE ON
10492.00	10.00	352.10	10488.50	133.10	-90.52	131.94	8.59	8.46	18.13	
10503.00	12.10	355.50	10499.30	135.20	-90.74	134.03	19.98	19.09	30.91	
10518.00	14.70	0.40	10513.89	138.67	-90.85	137.50	18.90	17.33	32.67	
10534.00	17.70	3.40	10529.25	143.13	-90.69	141.96	19.46	18.75	18.75	
10544.00	19.40	5.30	10538.73	146.30	-90.45	145.14	18.04	17.00	19.00	
10563.00	22.60	8.20	10556.47	153.06	-89.64	151.91	17.70	16.84	15.26	
10583.00	26.50	7.90	10574.66	161.29	-88.47	160.15	19.51	19.50	-1.50	
10594.00	30.00	8.80	10584.35	166.44	-87.72	165.31	32.05	31.82	8.18	
10609.00	33.80	9.40	10597.08	174.26	-86.46	173.15	25.42	25.33	4.00	
10626.00	35.20	15.70	10611.09	183.65	-84.36	182.56	22.54	8.24	37.06	
10630.00	36.20	16.90	10614.34	185.89	-83.71	184.81	30.52	25.00	30.00	
10657.00	43.80	16.20	10635.01	202.51	-78.77	201.49	28.20	28.15	-2.59	
10665.00	46.30	14.60	10640.66	207.97	-77.27	206.97	34.30	31.25	-20.00	
10675.00	49.80	12.00	10647.35	215.21	-75.57	214.23	39.98	35.00	-26.00	
10688.00	53.90	9.70	10655.37	225.24	-73.65	224.29	34.47	31.54	-17.69	
10703.00	60.30	8.30	10663.52	237.68	-71.68	236.75	43.38	42.67	-9.33	
10721.00	67.40	7.40	10671.45	253.67	-69.48	252.77	39.70	39.44	-5.00	
10751.00	79.10	3.20	10680.08	282.22	-66.87	281.35	41.23	39.00	-14.00	
10766.00	81.20	3.20	10682.65	296.98	-66.04	296.12	14.00	14.00	0.00	
10785.00	83.50	3.20	10685.18	315.78	-64.99	314.93	12.11	12.11	0.00	
10801.00	85.50	3.60	10686.71	331.68	-64.05	330.84	12.75	12.50	2.50	
10817.00	87.30	3.70	10687.71	347.61	-63.03	346.78	11.27	11.25	0.62	
10848.00	90.80	3.90	10688.23	378.54	-60.98	377.73	11.31	11.29	0.65	

SUR: J-21-15s-36e, 2000/S & 2220/E
 BHL: G-21-15s-36e, 3584/S & 2209/E
 API #30-025-38690



Weatherford International Ltd.

SURVEY REPORT

**Weatherford**

Company: CIMAREX Date: 10/1/2008 Time: 14:00:49 Page: 2
Field: Lea Co. NM (NAD 83) Co-ordinate(NE) Reference: Site: Caudill South 21 Fee #3, True Nort
Site: Caudill South 21 Fee #3 Vertical (TVD) Reference: SITE 3916.0
Well: #3 Section (VS) Reference: Well (0.00N,0.00E,0.73Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

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	Comment
10858.00	91.20	4.80	10688.05	388.50	-60.22	387.71	9.85	4.00	9.00	
10880.00	91.40	5.10	10687.55	410.42	-58.32	409.64	1.64	0.91	1.36	
10911.00	92.50	5.10	10686.50	441.28	-55.57	440.53	3.55	3.55	0.00	
10943.00	93.20	4.60	10684.91	473.12	-52.86	472.41	2.69	2.19	-1.56	
10974.00	94.10	4.30	10682.94	503.97	-50.46	503.28	3.06	2.90	-0.97	
11006.00	93.70	4.10	10680.76	535.81	-48.12	535.15	1.40	-1.25	-0.62	
11037.00	93.80	3.90	10678.73	566.66	-45.97	566.03	0.72	0.32	-0.65	
11069.00	94.00	3.70	10676.55	598.52	-43.85	597.91	0.88	0.62	-0.62	
11100.00	92.90	4.10	10674.69	629.39	-41.75	628.81	3.77	-3.55	1.29	
11132.00	92.90	3.70	10673.07	661.28	-39.57	660.72	1.25	0.00	-1.25	
11164.00	92.90	3.60	10671.45	693.17	-37.54	692.64	0.31	0.00	-0.31	
11196.00	93.00	3.40	10669.80	725.07	-35.59	724.56	0.70	0.31	-0.62	
11227.00	93.30	3.20	10668.10	755.97	-33.81	755.48	1.16	0.97	-0.65	
11259.00	93.90	3.40	10666.09	787.85	-31.97	787.38	1.98	1.87	0.62	
11291.00	94.10	3.00	10663.86	819.73	-30.18	819.28	1.39	0.62	-1.25	
11323.00	92.60	2.80	10661.99	851.63	-28.57	851.20	4.73	-4.69	-0.62	
11354.00	92.20	3.20	10660.69	882.56	-26.95	882.15	1.82	-1.29	1.29	
11385.00	92.40	2.80	10659.45	913.49	-25.33	913.10	1.44	0.65	-1.29	
11417.00	92.60	2.70	10658.05	945.42	-23.79	945.05	0.70	0.62	-0.31	
11449.00	91.00	2.70	10657.05	977.37	-22.29	977.01	5.00	-5.00	0.00	
11481.00	91.40	2.70	10656.38	1009.33	-20.78	1008.98	1.25	1.25	0.00	
11512.00	90.80	3.90	10655.78	1040.27	-18.99	1039.95	4.33	-1.94	3.87	
11544.00	91.20	3.70	10655.22	1072.20	-16.87	1071.90	1.40	1.25	-0.62	
11574.00	90.80	3.00	10654.70	1102.14	-15.12	1101.86	2.69	-1.33	-2.33	
11606.00	91.10	2.70	10654.17	1134.10	-13.53	1133.83	1.33	0.94	-0.94	
11638.00	92.30	3.60	10653.22	1166.03	-11.77	1165.79	4.69	3.75	2.81	
11670.00	92.70	3.60	10651.82	1197.94	-9.77	1197.72	1.25	1.25	0.00	
11701.00	92.90	3.60	10650.31	1228.84	-7.82	1228.64	0.65	0.65	0.00	
11732.00	92.30	3.90	10648.90	1259.74	-5.80	1259.57	2.16	-1.94	0.97	
11764.00	91.50	3.60	10647.84	1291.66	-3.70	1291.51	2.67	-2.50	-0.94	
11795.00	89.70	2.80	10647.52	1322.61	-1.97	1322.47	6.35	-5.81	-2.58	
11827.00	90.00	2.70	10647.60	1354.57	-0.44	1354.45	0.99	0.94	-0.31	
11858.00	90.30	2.50	10647.52	1385.54	0.97	1385.44	1.16	0.97	-0.65	
11890.00	91.10	2.30	10647.13	1417.51	2.31	1417.42	2.58	2.50	-0.62	
11922.00	91.40	2.50	10646.43	1449.47	3.65	1449.40	1.13	0.94	0.62	
11954.00	92.20	2.80	10645.43	1481.42	5.13	1481.36	2.67	2.50	0.94	
11985.00	92.40	3.40	10644.18	1512.35	6.80	1512.31	2.04	0.65	1.94	
12017.00	92.00	3.40	10642.95	1544.27	8.70	1544.25	1.25	-1.25	0.00	LAST SVY
12056.00	92.00	3.40	10641.59	1583.18	11.01	1583.19	0.00	0.00	0.00	PROJ. TO BIT

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
10400.00	10397.09	TIE ON
12017.00	10642.95	LAST SVY
12056.00	10641.59	PROJ. TO BIT



CAUDILL SOUTH 21 FEE #3
LEA COUNTY, NEW MEXICO



Weatherford®

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	10439.00	2.16	334.62	6520.06	124.91	-89.31	0.00	0.00	123.76	
2	10452.00	3.57	4.30	6533.05	125.53	-89.38	15.38	62.01	124.39	
3	10457.00	3.57	4.30	6538.04	125.84	-89.36	0.00	0.00	124.70	
4	10839.54	92.47	4.30	6769.00	381.81	-70.12	23.24	0.00	380.88	
5	12045.12	92.47	4.30	6717.00	1582.88	20.14	0.00	0.00	1583.01	PBHL

WELL DETAILS

Name+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#3 0.00	0.00	729526.40	855805.70	33°00'04.505N	103°18'27.380W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	10633.00	1582.88	20.14	731109.40	855810.40	Point

SITE DETAILS

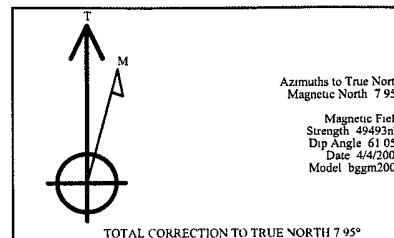
Caudill South 21 Fee #3
2000' FSL 2220' FEL of SEC 21, T-15-S, R-36-E
Site Centre Northing 729526.40
Easting 855805.70
Ground Level 3895.00
Positional Uncertainty 0.00
Convergence 0.56

FIELD DETAILS

Lea Co., NM (NAD 83)
Geodetic System US State Plane Coordinate System 1983
Ellipsoid GRS 1980
Zone New Mexico, Eastern Zone
Magnetic Model bggm2007
System Datum Mean Sea Level
Local North True North

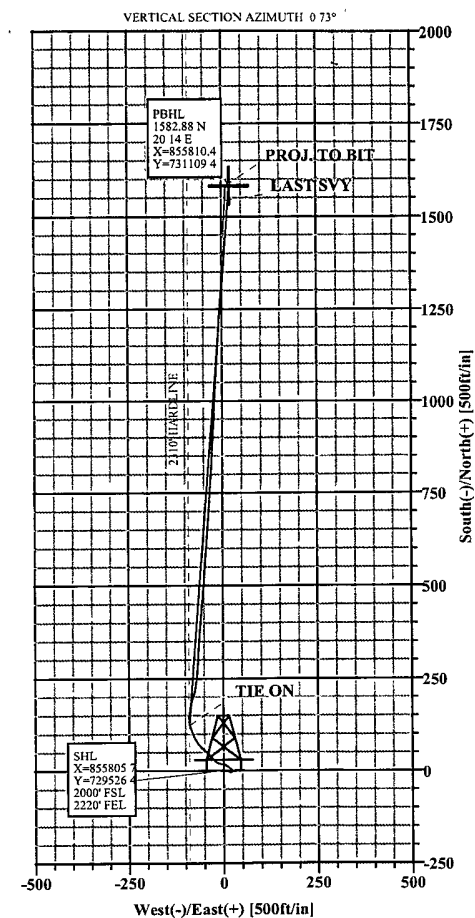
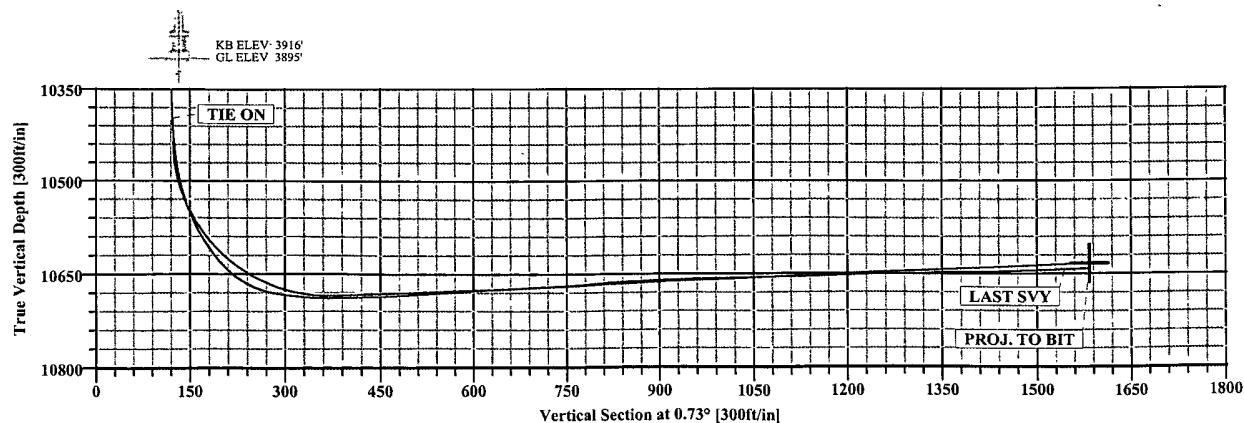
Proj. to Bit Survey: WFT SVY (#3/1)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
63	12056.00	92.00	3.40	10641.59	1583.18	11.01	0.00	0.00	1583.19



LEGEND

— #3, I, Plan #4
— WFT SVY



Survey WFT SVY (#3/1)

Created By Jayme Wilson

Date 10/1/2008