



Project: Eddy County, NM (NAD27 NME)
 Site: Crow Federal
 Well: #12H
 Wellbore: OH/Job #1310847
 Design: Plan#3-07-09-13
 Rig: Capstar 114

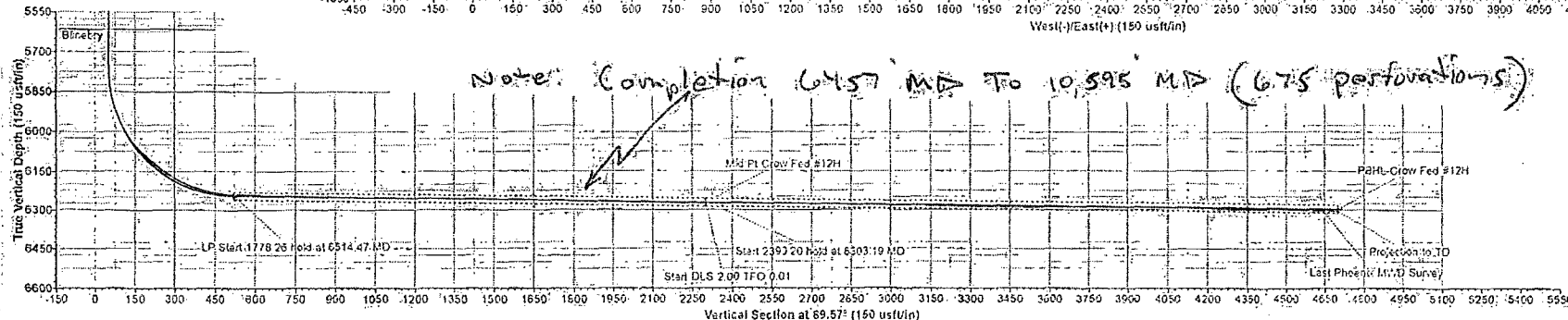
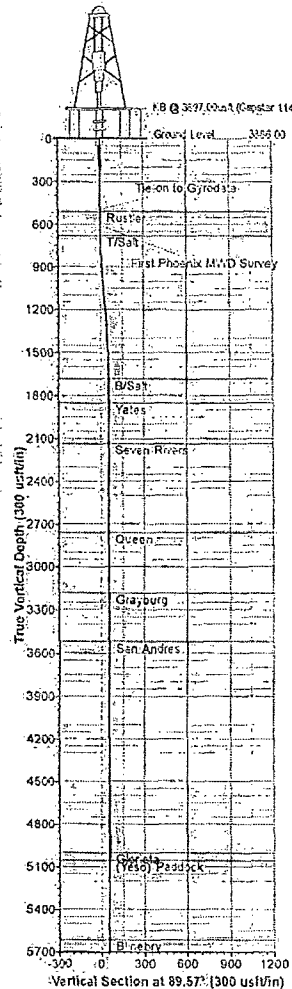
30-015-40576



PHOENIX
 TECHNOLOGY SERVICES



Alignments to Grid North
 True North: -0.25°
 Magnetic North: 7.41°
 Magnetic Field
 Strength: 48867.9 nT
 Dip Angle: 66.65°
 Date: 04/25/2012
 Model: IGRF2010_14



WELL DETAILS											
N/S		E/W		North	Ground Level	Easting	3513.00	Latitude	Longitude		
0.00		0.00		87110.90	61525.50	32° 50' 40.214349 N	103° 51' 53.165607 W				
SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	N/S	E/W	Deg	TFace	VFace	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Start B/Sat 2.00
2	675.00	0.00	0.00	675.00	0.00	0.00	0.00	0.00	0.00	0.00	Start 500.00 hold at 215.00 MD
3	875.00	4.00	83.51	874.84	0.05	6.53	2.03	63.57	6.53		Start Dip -1.50
4	1315.00	4.00	83.51	1313.62	0.31	41.65	0.00	0.00	41.65		Start 1123.51 hold at 1211.67 MD
5	1611.67	0.00	0.00	1610.07	0.38	51.16	-1.50	163.00	51.16		ROP Start DLS 12.00 TFO 0.01
6	5711.13	0.00	0.00	5709.58	0.38	51.16	0.00	0.00	51.16		LP Start 1778.26 hold at 6514.47 MD
7	6514.47	0.00	0.00	6512.00	3.55	521.99	12.00	63.57	521.99		Start DLS 2.00 TFO 0.01
8	6722.73	0.00	0.00	6720.00	17.42	2230.53	0.00	0.00	2230.53		Start 2392.20 hold at 6303.19 MD
9	6803.19	0.00	0.00	6800.00	17.29	2310.43	2.00	0.00	2310.43		Start 2392.20 hold at 6303.19 MD
10	10595.32	0.00	0.00	10593.00	35.00	4700.53	0.00	0.00	4700.53		TD at 10593.33

DESIGN-TARGET DETAILS											
Name	TVD	N/S	E/W	North	Easting	Latitude	Longitude	Shape			
Md Ft Crow Fed #12H	6722.00	17.42	2230.53	671213.32	615255.53	32° 50' 40.214349 N	103° 51' 26.210183 W	Rectangle (Sides 1.30) 0 W50			
	plan 12h target center										
PdH-Crow Fed #12H	6797.00	35.60	4700.40	671263.50	615568.40	32° 50' 43.365245 N	103° 50' 58.072343 W	Rectangle (Sides 1.30) 0 W50			
	plan 12h target center										

PROJECT DETAILS: Eddy County, NM (NAD27 NME)											
Geoid 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: Crow Federal											
Site Center Northing: 67113.50											
Easting: 61525.50											
Positional Uncertainty: 0.00											
Convergence: 0.75											
Local North: Grid											
FORMATION TOP DETAILS											
TVD (ft)	MD (ft)	Formation	Dip (deg)	Dip (ft)							
512.00	512.00	Rustler									
633.00	633.00	T/Sat									
1637.00	1637.00	B/Sat									
1654.00	1654.00	Yates									
2138.00	2138.00	Seven Rivers									
2763.00	2763.00	Grayburg									
3183.00	3183.00	San Andres									
3523.00	3523.00	San Andres									
5003.00	5003.00	Gloria									
5557.00	5557.00	(Red) Pecos									
5615.00	5615.00	Biretry									

Map System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone Name: New Mexico East 3001
 Local Origin: Well #12H, Grid North
 Latitude: 32° 50' 40.214349 N
 Longitude: 103° 51' 53.165607 W
 Grid East: 643906.00
 Grid North: 671260.50
 Scale Factor: 1.000
 Geomagnetic Model: IGRF2010_14
 Sample Date: 25-Apr-12
 Magnetic Declination: 7.46°
 Dip Angle from Horizontal: 60.65°
 Magnetic Field Strength: 48868
 To convert a Magnetic Direction to a Grid Direction, Add 7.41°
 To convert a Magnetic Direction to a True Direction, Add 7.66° East
 To convert a True Direction to a Grid Direction, Subtract 0.25°

LEGEND

- #12H, OH/Job #1310847; Surveys (Capstar 114) V0
- #10H, OH/Job #1310266; Surveys (Capstar 114) V0
- #11H, OH/Job #1310714; Surveys (Capstar 114) V0
- #13H, OH/Job #1310316; Surveys (Capstar 114) V0
- #14H, OH/Job #1310557; Surveys (Capstar 114) V0
- #15H, OH/Job #1310561; Surveys (Capstar 114) V0
- Plan#3-07-09-13

