

WELL LOGS

K Z

API number:	30-025-38858		
OGRID:		Operator:	MARBOB ENERGY CORP
		Property:	SCAB FEDERAL # 1

surface	ULSTR:	A	22	T	18S	R	33E
			990	FNL	660	FEL	

BH Loc	ULSTR:	A	22	T	18S	R	33E
			990	FNL	660	FEL	

Ground Level:	3891	DF:	3900	KB:	3901	
Datum:	KB			TD:	6102	

Land:	FEDERAL	Completion Date: (1)	10/15/2008
		Date Logs Received:	10/22/2008
		Date Logs Due in: (2)	

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

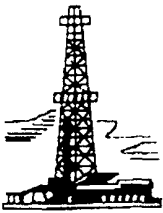
Date Due In: (1) is equal to Completion Date (1) + 20 days

Logs	Depth interval		
DSN/SDL	190	6045	Spectral Density Dual Spaced Neutron
DLL/MGRD	1596	6100	Dual Laterolog Micro Guard Log

K Z

OCD TOPS

Rustler	1559	Strawn			
Tansill	2898	Atoka			
Yates	3054	Morrow			
7R	3547				
T. Bowers Sd		Austin			
B. Bowers Sd		Chester			
Queen	4268	Miss Lime			
Penrose					
Grayburg	4872				
San Andres	5040				
Getaway Bank					
Delaware Sd	5233				
Bone Spring					
1st Sd					
2nd Carb					
2nd Sd					
3rd Carb					
3rd Sd					
Wolfcamp					



Permian Drilling Corporation

P. O. Box 726

(505)397-3798

Fax (505)393-2448

Hobbs, New Mexico 88241

INCLINATION REPORT

DATE: 9/2/2008

WELL NAME AND NUMBER: Scab Fed #1

LOCATION: Lea Eddy Co., NM

OPERATOR: MARBOB ENERGY CORP.

DRILLING CONTRACTOR: PERMIAN DRILLING CORPORATION

30-025- 38858

A-22-18s-33e

990/N & 660/E

The undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that he has conducted deviation tests and obtained the following results:

DEGREE	DEPTH	DEGREE	DEPTH	DEGREE	DEPTH
1.25	474	0.79	1444	0.75	4779
1.00	570	1.06	1556	0.75	5254
2.00	653	1.00	1184	1.00	5730
2.25	682	0.50	1430	0.50	6080
3.00	708	1.00	1939		
2.50	766	1.25	2283		
2.73	830	2.00	2697		
1.76	886	2.00	2980		
0.79	1127	2.25	3071		
1.23	1253	1.00	3362		
1.14	1317	1.25	3836		
0.70	1380	0.75	4302		

Drilling Contractor:
Permian Drilling Corporation

By: Sherry Coskrey
Sherry Coskrey
Regulatory Clerk

Subscribed and sworn to before me on this 9th day of Sept., 2007.

My Commission Expires: June 12, 2010

Chris B. Black



DIRECTIONAL SURVEY REPORT

3D-025-38858

MARBOB ENERGY

SCAB FED COM 1H

LEA COUNTY, NEW MEXICO

PREPARED BY: FRANCISCO SINISTERRA

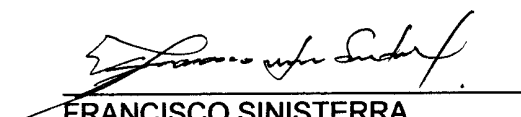
Pathfinder Energy Services, Inc.
6213 W. County Road 112 • Midland, TX • 79706
(432)681-6000

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) K. TABOR
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 8/10/08 OF 8/11/08
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: LEA COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

MARBOB ENERGY CORPORATION.
SCAB FED COM 1H
LEA COUNTY, NM
RIG: PERMIAN #4
9. SURVEY CERTIFIED FROM: 830 TO 1556 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 108.83 FEET ON A BEARING OF 80.96 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 1605 FEET,
ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.


FRANCISCO SINISTERRA
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 08/10/2008
Date Completed: 08/12/2008

MARBOB ENERGY CORP.
SCAB FED COM # 1H
LEA COUNTY, NM
Rig:PERMIAN 4
PathFinder Office Supervisor: CODY MEBANE
PathFinder Field Engineers:K. TABOR

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.44.5.3394 N LON:103.38.38.4623 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 711964.8000 Y: 631726.7000
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.62° EAST TO GRID
Vertical Section Plane: 0.00
Survey Vert. Reference: 0.00' Ground Level To Ground

Measured Depth	1605.00	(feet)
Inclination	1.06	(deg)
Azimuth	163.45	(deg)
True Vertical Depth	1604.82	(feet)
Vertical Section	17.09	(feet)
Survey X cord	712072.28	(feet)
Survey Y cord	631743.79	(feet)
Survey Lat	32.73486157 N	(deg)
Survey Lon	103.64366743 W	(deg)
Rectangular Corr. N/S	17.09 N	(feet)
Rectangular Corr. E/W	107.48 E	(feet)
Closure Distance	108.83	(feet)
Direction of Closure	80.96	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY CORP.
SCAB FED COM # 1H
LEA COUNTY, NM
Rig:PERMIAN 4
PathFinder Office Supervisor: CODY MEBANE
PathFinder Field Engineers: K. TABOR

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Ref GRID Coord: X: 711964.8000 Y: 631726.7000
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.62° EAST TO GRID
Vertical Section Plane: 0.00
Survey Vert. Reference: 0.00' Ground Level To Ground

Survey Calculations by PathCalc v1.97 using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
TIE IN @ 709' MD ASSUMING VERTICAL.										
709.00	0.00	0.00	709.00	0.00	32.73	32.73 N	103.64 E	108.69@	72.47	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
830.00	2.73	171.45	829.95	121.00	29.88	29.88 N	104.07 E	108.27@	73.98	2.26
886.00	1.76	164.86	885.91	56.00	27.73	27.73 N	104.49 E	108.11@	75.14	1.79
944.00	0.79	168.64	943.90	58.00	26.48	26.48 N	104.80 E	108.10@	75.82	1.68
1001.00	0.53	148.42	1000.89	57.00	25.87	25.87 N	105.02 E	108.16@	76.16	0.61
1127.00	0.79	168.46	1126.88	126.00	24.52	24.52 N	105.50 E	108.31@	76.91	0.27
1253.00	1.23	161.34	1252.86	126.00	22.39	22.39 N	106.10 E	108.44@	78.08	0.36
1380.00	0.70	171.98	1379.85	127.00	20.33	20.33 N	106.65 E	108.57@	79.21	0.44
1507.00	0.79	163.80	1506.83	127.00	18.72	18.72 N	107.00 E	108.63@	80.08	0.11
1556.00	1.06	163.45	1555.83	49.00	17.96	17.96 N	107.22 E	108.72@	80.49	0.55
STRAIGHT LINE PROJECTION TO BIT @ 1605'MD.										
1605.00	1.06	163.45	1604.82	49.00	17.09	17.09 N	107.48 E	108.83@	80.96	0.00



TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	MARBOB ENERGY		
LEASE / WELL No.:	SCAB FED COM	1H	
WELL LOCATION:	LEA COUNTY, NEW MEXICO		
COUNTY / STATE / COUNTRY:	LEA	NM	U.S.A
RIG:	PERMIAN #4		
API WELL No:	30-025-38858		
JOB No:	101007763 WT-WT		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	PATHFINDER ENERGY SERVICES		

WELL SITE INFORMATION

MAGNETIC DECLINATION:			
On Wall Plat:	7.62	LWD Calculated:	7.62
X =	711964.800000	Feet	Y = 631726.700000
		Feet	
SITE LATITUDE:	32.734817 N	SITE LONGITUDE:	103.644017 W
GRID SYSTEM:	TRUE ☐ UTM ☐ LAMBERT ☒	ZONE:	NEW MEXICO EAST
PROPOSED DRIFT DIRECTION:	0		
KELLY BUSHING ELEVATION:	15		
ALTITUDE:	Feet	WATER DEPTH:	0
		Feet	

TIE-IN SURVEY

MEASURED DEPTH:	709		
DRIFT ANGLE:	0		
DRIFT DIRECTION:	0		
TRUE VERTICAL DEPTH:	709		
VERTICAL SECTION:	0		
RECTANGULAR COORDINATE (N / S) :	32.73		
RECTANGULAR COORDINATE (E / W) :	103.64		
CLOSURE DISTANCE / DIRECTION:	0	0	
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	PATHFINDER ENERGY		
COPY OF TIE-IN SURVEY REPORT	☐ YES ☒ NO		

WELL PLAN

KICKOFF DEPTH:	TOTAL DEPTH:	1600
KICKOFF ANGLE:	MAX ANGLE:	3

PES Engineers:

**Signature of both field engineers required if applicable

Directional Driller:

DATE: 8-12-07

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

Sat Aug 09 22:42:41 2008

Coordinates

Latitude: 32.734817 N (32 deg. 44 min. 5.3394 sec.)
Longitude: 103.644017 W (-103 deg. 38 min. 38.4623 sec.)
Elevation: 3891.00 feet.
Calculation Date: Aug/09/2008

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.7331 degrees
Total Magnetic Field: 0.49225 gauss
Magnetic Declination: 7.988042 degrees
Horizontal Intensity: 0.240648 gauss

To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.988042 Degs

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 711964.8000 feet
Y: 631726.7000 feet
True to Grid: (convergence) -0.372762 degrees
Magnetic to Grid: 7.615280 degrees

To Convert a Magnetic Dir. to a GRID dir. Add 7.615280 Degs.