KOCH EXPLORATION CO LLC DAILY DRILLING REPORT

Well:	WRD Federal 21-9	Date:	7-27-012	Drilled to:	
County/ST:	Rio Blanco, CO	Days:	1	Drilled from:	0
Location:	Sec 21, T-2N, R-97W	Rig:	DUCO	Footage:	0
Elevation:		Supervisor:	Clark		

BIT DATA

Bit #	Size	Make	Type	Serial #	Jets	Cond
	12 1/4					
Bit #	In	Out	Feet	Hours	WOB	RPM

PUMP DATA

Pump #	Make	Model	Liner	SPM	Rate	Pressure

SURVEY DATA

Depth	Deviation	Direction	Depth	Deviation	Direction	

MUD DATA

Weight	Visc	YP	PV	Gels	WL	Cake
% Oil	% Water	% Solids	pH	Ca	Cl	LCM

AIR DATA-DRILLING / **GAS DATA-DRILLING**

Air Rate	Foam Rate	Foam Mix	Depth	Flare	Duration	Operation

COST DATA (US$)

	Daily	Cumulative
Location		
Rig move		
Rig		
Fuel		
Camper		
BOPE		
Bits		
Air Equip		
Equip rental		
Mud		
Mud Logger		
Trucking		
Water		
Labor		
Supervision		
Core/DST		
Logs		
Cement		
Fishing		
Misc		
Casing		
Tubing		
Rods		
Wellhead		
TOTAL		

Fuel Usage

Rig EngType	Model	HP	Fuel Type	Gallons Used	Pump Eng Type	Model	HP	Gallons Used
Detroit	Series 50	380	Diesel	10	Detroit	Series 50/Diesel	380	
	Total Gals	Rig Eng	10	Pump Eng	0	Ttl Rig & Pump	10	

TIME DISTRIBUTION

Hours	Operation
5:30-7:00	Crew travel from Vernal.
7:00-14:30	Go over plans for day with crew. Mention during meeting that the 21-9 may have undersized tubing.
	Rode rig from the A-31 to the 21-9. MIRUPU. Spot support equipment. A 10 mile move. UFWH. PU on flange, find that the well did have 1-1/4" tubing.
	Call for correct handling tools to be brought out from Rangely. Tools on hand in 1.5 hours. RUTE. FUBOP.
	TOOH/laying tubing on ground. Back in tubing float with 2-3/8". PU bit and scraper, trip in hole, tallying pipe off of trailer. Tag up just above the
	CIBP. TOOH. Lay down bit and scraper. SWI. SDFD.
14:30-16:00	Crew travel to Vernal.
	Note: BLM had no one to witness cement job. Elected to wait and pump 1st job on Monday AM.

BHA DATA:

OPERATION @ 6 AM:

REMARKS:

KOCH EXPLORATION CO LLC DAILY DRILLING REPORT

Well:	WRD Federal 21-9	Date:	7-30-012	Drilled to:	
County/ST:	Rio Blanco, CO	Days:	2	Drilled from:	0
Location:	Sec 21, T-2N, R-97W	Rig:	DUCO	Footage:	0
Elevation:	0	Supervisor:	Clark		

BIT DATA

Bit #	Size	Make	Type	Serial #	Jets	Cond
Bit #	In	Out	Feet	Hours	WOB	RPM

PUMP DATA

Pump #	Make	Model	Liner	SPM	Rate	Pressure
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		

SURVEY DATA

Depth	Deviation	Direction	Depth	Deviation	Direction	

MUD DATA

Weight	Visc	YP	PV	Gels	WL	Cake
% Oil	% Water	% Solids	pH	Ca	Cl	LCM

AIR DATA-DRILLING

Air Rate	Foam Rate	Foam Mix

GAS DATA-DRILLING

Depth	Flare	Duration	Operation

COST DATA (US$)

	Daily	Cumulative
Location		
Rig move		
Rig		
Fuel		
Camper		
BOPE		
Bits		
Air Equip		
Equip rental		
Mud		
Mud Logger		
Trucking		
Water		
Labor		
Supervision		
Core/DST		
Logs		
Cement		
Fishing		
Misc		
Casing		
Tubing		
Rods		
Wellhead		
TOTAL		

Fuel Usage

Rig EngType	Model	HP	Fuel Type	Gallons Used	Pump Eng Type	Model	HP	Gallons Used
Detroit	Series 50	380	Diesel	12	Detroit	Series 50/Diesel	380	5
	Total Gals	Rig Eng	22	Pump Eng	5	Ttl Rig & Pump	27	

TIME DISTRIBUTION

Hours	Operation
5:30-7:00	Crew travel from Vernal.
7:00-10:30	Go over plans for day with crew. Trip in hole, retally tubing from derrick. Tag up @ 1113', pipe measurement. Records show a CIBP @ 1121' with 21' of
	cement on top of the CIBP. Witnessed by BLM rep Justin Wilson. TOOH. PU/4-1/2" full bore packer, trip in. Set @ 690', test casing to 600# for
	15 minutes, OK. TOOH/lay down packer. TIH/ set EOT @ 1109'. Mix cement, pump 36 sacks 15.6#, 1.16 Yield, (41.76 CUFT). Displace, trip out. WOC
10:30-15:00	WOC.
15:00-16:30	At 3:00, RUWL. Go over plans with WL crew. Makeup perf guns, 4spf, RIH. Tag TOC with a very soft tag @ 680'. This would be a legal height above
	the top perfs @ 748'. Pull up to 494'. Shoot 4 squeeze holes @ 494'. POOH. Line showed some cement on it. RDWL. SWI. SDFD.
16:30-18:00	Crew travel to Vernal.
	Note: We are having to juggle work to match WL truck availabliity. We will tag for top of cement in the AM and test for production perfs shut off.

BHA DATA:

OPERATION @ 6 AM:

REMARKS:

KOCH EXPLORATION CO LLC DAILY DRILLING REPORT

Well:	WRD Federal 21-9	Date:	7-31-012	Drilled to:	
County/ST:	Rio Blanco, CO	Days:	3	Drilled from:	0
Location:	Sec 21, T-2N, R-97W	Rig:	DUCO	Footage:	0
Elevation:	0	Supervisor:	Clark		

BIT DATA

Bit #	Size	Make	Type	Serial #	Jets	Cond
Bit #	In	Out	Feet	Hours	WOB	RPM

PUMP DATA

Pump #	Make	Model	Liner	SPM	Rate	Pressure
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		

SURVEY DATA

Depth	Deviation	Direction	Depth	Deviation	Direction

MUD DATA

Weight	Visc	YP	PV	Gels	WL	Cake
% Oil	% Water	% Solids	pH	Ca	Cl	LCM

AIR DATA-DRILLING

Air Rate	Foam Rate	Foam Mix

GAS DATA-DRILLING

Depth	Flare	Duration	Operation

COST DATA (US$)

	Daily	Cumulative
Location		
Rig move		
Rig		
Fuel		
Camper		
BOPE		
Bits		
Air Equip		
Equip rental		
Mud		
Mud Logger		
Trucking		
Water		
Labor		
Supervision		
Core/DST		
Logs		
Cement		
Fishing		
Misc		
Casing		
Tubing		
Rods		
Wellhead		
TOTAL		

Fuel Usage

Rig EngType	Model	HP	Fuel Type	Gallons Used	Pump Eng Type	Model	HP	Gallons Used
Detroit	Series 50	380	Diesel	5	Detroit	Series 50/Diesel	380	5
	Total Gals	Rig Eng	27	Pump Eng	10	Ttl Rig & Pump	37	

TIME DISTRIBUTION

Hours	Operation
5:30-7:00	Crew travel from Vernal.
7;00-11:00	Go over plans for day with crew and packer hand. TIH, tag TOC @ 624'. TOOH. PU/ 4-1/2" packer, trip in, set @ 561', pressure up below packer to
	500#, held 15 minutes OK. Release packer, trip out. TIH/ set EOT @ 623'. Shut casing, open bradenhead, attempt to establish circulation through
	perfs @ 494'. Pressure to 500# 3 times, could not break circulation. Open casing valve, mix cement, start pumping cement. Pump 40 sks, 15.6#,
	1.16 Yield(46.4 CUFT). With 40 sks pumped, we had pump trouble. Stop and work on pump, could not get pump to work after 15 minutes. Break off
	lines, clean up lines and then trip out of hole with tubing. SWI. SDFD.
11:00-15:00	Crew working on pump. Believe that they have it fixed. Crew travel to Vernal.
	Note: Will tag up, cement should not be far down, top of the casing and cut off in the AM.

BHA DATA:

OPERATION @ 6 AM:

REMARKS:

KOCH EXPLORATION CO LLC DAILY DRILLING REPORT

Well:	WRD Federal 21-9	Date:	8-1-012	Drilled to:	
County/ST:	Rio Blanco, CO	Days:	4	Drilled from:	0
Location:	Sec 21, T-2N, R-97W	Rig:	DUCO	Footage:	0
Elevation:	0	Supervisor:	Clark		

BIT DATA

Bit #	Size	Make	Type	Serial #	Jets	Cond
Bit #	In	Out	Feet	Hours	WOB	RPM

PUMP DATA

Pump #	Make	Model	Liner	SPM	Rate	Pressure
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		
0	0	0	0	0		

SURVEY DATA

Depth	Deviation	Direction	Depth	Deviation	Direction	

MUD DATA

Weight	Visc	YP	PV	Gels	WL	Cake
% Oil	% Water	% Solids	pH	Ca	Cl	LCM

AIR DATA-DRILLING

Air Rate	Foam Rate	Foam Mix

GAS DATA-DRILLING

Depth	Flare	Duration	Operation

COST DATA (US$)

	Daily	Cumulative
Location		
Rig move		
Rig		
Fuel		
Camper		
BOPE		
Bits		
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Equip rental		
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Trucking		
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Labor		
Supervision		
Core/DST		
Logs		
Cement		
Fishing		
Misc		
Casing		
Tubing		
Rods		
Wellhead		
TOTAL		

Fuel Usage

Rig EngType	Model	HP	Fuel Type	Gallons Used	Pump Eng Type	Model	HP	Gallons Used
Detroit	Series 50	380	Diesel	5	Detroit	Series 50/Diesel	380	5
	Total Gals	Rig Eng	32	Pump Eng	15	Ttl Rig & Pump	47	

TIME DISTRIBUTION

Hours	Operation
5:30-7:00	Crew travel from Vernal.
7:00-13:00	Go over plans for day with crew and BLM hand, Justin Wilson. TIH/tag TOC @ 291'. Looks like the perf holes we shot drank some cement.
	Set EOT @ 281', pump 28 sks 15.6#, 1.16 Yield, (32.48 CUFT), cement. 2 good bbls of cement to surface. TOOH. RDTE. Move tubing float out.
	Dig out wellhead. Cut off wellhead 4' below surface. RIH/with 1" pipe between the 4-1/2" and 7". Fill up the 4-1/2" X 7" annulus, let the cement top off
	the 4-1/2" casing stub to surface. Pump a total of 16 sks 15.6#, 1.16 Yield(18.56 CUFT). WOC 15 minutes, cement did not drop. Weld top cap on with
	correct information. RDPU. Cover up hole and finish clean up of location.
13:30-14:00	Rode all equipment to the old Chesapeake yard on the hiway as it looks like rain.
14:00-15:30	Crew travel to Vernal.
	Note: Well is ready for final reclamation.
	GPS: 40.126932 108.276257

BHA DATA:

OPERATION @ 6 AM:

REMARKS: