#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)  BRIAN WOOD (PHONE 505 4)  Signature  THIS SPACE FOR	Date		11/17/2007 E USE	(FAX 505 466-9682)	
Name (Printed/Typed)  BRIAN WOOD (PHONE 505 4			11/17/2007	(FAX 505 466-9682)	
Name (Printed/Typed)	466-8120) Title	CONSULTANT		(FAX 505 466-9682)	
cc: BLM, Rodriguez				MON 2 0 2017  FARMANGTON FIELD OFFICE BY	
<del>-</del>	,			ACCEPTED FOR RELORD	
				DIST. 3	
Will set 7-5/8" casing at 6,400 instead of 6,100'.  See attached cement program.  At 5,846' as of 11-16-07.	•			RCVD NOV 20 '07 OIL CONS. DIV.	
13. Describe Proposed or Completed Operation (clearly state all per If the proposal is to deepen directionally or recomplete horizonta Attach the Bond under which the work will be performed or profollowing completion of the involved operations. If the operation testing has been completed. Final Abandonment Notices shall be determined that the site is ready for final inspection.)	ally, give subsurface loca wide the Bond No. on fi on results in a multiple co	ations and measured and t ile with BLM/BIA. Requ completion or recompletion	rue vertical dept ired subsequent in a new interv	hs of all pertinent markers and zones. reports shall be filed within 30 days al, a Form 3160-4 shall be filed once	
Subsequent Report Casing Repair Change Plans Final Abandonment Notice Convert to Injection	Plug and Abando Plug Back				
✓ Notice of Intent  ✓ Acidize  ✓ Alter Casing  Casing Repair	Deepen Fracture Treat New Construction	Production (S	tart/Resume)	Water Shut-Off Well Integrity Other	
12. CHECK APPROPRIATE BOX(ES) TO TYPE OF SUBMISSION		TYPE OF ACTION	KEPORI, OI	R OTHER DATA	
	O DIDICATE MAT	TIPE OF NOTICE		RRIBA COUNTY, NM	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL: 3250' FSL & 1220' FEL 3-23N-1W NMPM			W. PUERTO CHIQUITO MANCOS  11. County or Parish, State		
3a. Address P. O. BOX 17098, SAN ANTONIO, TX 78217	Bureau of Land Management  3b. Phone Not (include area code)  210 829 4888		9. API Well No. 30-039-30272  10. Field and Pool, or Exploratory Area		
1. Type of Well ☐ ☐ Gas Well ☐ ☐ Other  2. Name of Operator U. S. ENERCORP, LTD.		1 9 2007		NA COLORADO 2/3 #1	
SUBMIT IN TRIPLICATE- Other inst	tructions on rev	erse side.	7. If Unit o  N/A	r CA/Agreement, Name and/or No.	
Do not use this form for proposals abandoned well. Use Form 3160 - 3	to drill or to re (APD) for such p	e-enter an proposals.	N/A	, Allottee or Tribe Name	
BUREAU OF LAND MAN SUNDRY NOTICES AND RE	5. Lease Serial No. NMNM-108021				

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease

FORM APPROVED OM B No 1004-0137 Expires: March 31, 2007

which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



## Job Information

# **Production Casing**

#1

10 3/4 Surface Casing

Outer Diameter Inner Diameter Linear Weight 0 - 350 ft (MD)

10.750 in 10.192 in 32.75 lbm/ft

9 7/8 Open Hole

Inner Diameter Job Excess 350 - 6400 ft (MD)

9.875 in 75 %

7 5/8 Production Casing

Outer Diameter Inner Diameter Linear Weight 0 - 6400 ft (MD)

7.625 in 6.969 in 26.40 lbm/ft

Multiple Stage Cementer

4400 ft (MD)

#### **Calculations**

## **Production Casing**

Stage 1 Spacer:	
•	1
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49.00 ft \* 0.2148 ft<sup>3</sup>/ft \* 75 %  $= 56.00 \text{ ft}^3$  $= 56.15 \text{ ft}^3$ Total Spacer = 10.00 bbl

Spacer:

299.00 ft \* 0.2148 ft<sup>3</sup>/ft \* 75 %  $= 112.37 \text{ ft}^3$  $= 112.29 \text{ ft}^3$ **Total Spacer** = 20.00 bbl

Spacer:

 $75.00 \text{ ft} * 0.2148 \text{ ft}^3/\text{ft} * 75 \%$  $= 28.19 \, \text{ft}^3$  $= 28.07 \, \text{ft}^3$ **Total Spacer** = 5.00 bbl

Cement: (1456.00 ft fill)

1456.00 ft \* 0.2148 ft<sup>3</sup>/ft \* 75 %  $= 547.20 \text{ ft}^3$ Total First Stage Lead Cement  $= 547.20 \text{ ft}^3$ = 97.46 bblSacks of Cement = 285 sks

Cement: (544.00 ft fill)

544.00 ft \* 0.2148 ft<sup>3</sup>/ft \* 75 %  $= 204.45 \text{ ft}^3$ First Stage Tail Cement  $= 204.45 \text{ ft}^3$ = 36.41 bbl

Shoe Joint Volume: (42.00 ft fill)

 $42.00 \text{ ft} * 0.2649 \text{ ft}^3/\text{ft}$  $= 11.13 \text{ ft}^3$ = 1.98 bbl $= 215.57 \text{ ft}^3$ Tail plus shoe joint = 38.40 bbl

Total Tail = 166 sks

Total Pipe Capacity:

 $6400.00 \text{ ft} * 0.2649 \text{ ft}^3/\text{ft}$  $= 1695.31 \text{ ft}^3$ = 301.95 bbl

Displacement Volume to Shoe Joint:

Capacity of Pipe - Shoe Joint = 301.95 bbl - 1.98 bbl

= 299.96 bbl

Stage 2 Spacer:

 $= 112.29 \text{ ft}^3$ Total Spacer = 20.00 bbl

Spacer:

 $= 28.07 \text{ ft}^3$ Total Spacer

= 5.00 bbl

Cement: (3882.00 ft fill)

 $350.00 \text{ ft} * 0.2495 \text{ ft}^3/\text{ft} * 0 \%$  $= 87.31 \text{ ft}^3$ 3532.00 ft \* 0.2148 ft<sup>3</sup>/ft \* 75 %  $= 1327.41 \text{ ft}^3$  $= 1414.72 \text{ ft}^3$ Total Second Stage Lead Cement = 251.97 bbl

=738 sksSacks of Cement

Cement: (518.00 ft fill)

518.00 ft \* 0.2148 ft<sup>3</sup>/ft \* 75 %  $= 194.68 \text{ ft}^3$  $= 194.68 \text{ ft}^3$ Second Stage Tail Cement = 34.67 bbl

Shoe Joint Volume: (0.00 ft fill)

 $0.00 \text{ ft} * 0.2649 \text{ ft}^3/\text{ft}$  $= 0.00 \text{ ft}^3$ = 0.00 bblTail plus shoe joint  $= 194.68 \text{ ft}^3$ 

= 34.67 bbl= 150 sksTotal Tail

Total Pipe Capacity:

 $4400.00 \text{ ft} * 0.2649 \text{ ft}^3/\text{ft}$  $= 1165.52 \text{ ft}^3$ = 207.59 bbl

Displacement Volume to Shoe Joint:

Capacity of Pipe - Shoe Joint = 207.59 bbl - 0.00 bbl

= 207.59 bbl

#### Job Recommendation

## **Production Casing**

Fluid Instructions

Stage 1

Fluid 1: Water Based Spacer

Water

Fluid Density:

8.33 lbm/gal

Fluid Volume:

10 bbl

Fluid 2: Water Based Spacer

Gelled Water

Fluid Density:

8.40 lbm/gal

10 lbm/bbl Bentonite (Gelling Agent) Fluid Volume:

20 bbl

Fluid 3: Water Based Spacer

Water

Fluid Density:

8.33 lbm/gal

Fluid Volume:

5 bbl

Fluid 4: First Stage Lead Cement

Halliburton Light Standard

5 lbm/sk Gilsonite (Lost Circulation Additive) 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive) Fluid Weight

12.30 lbm/gal

Slurry Yield:

 $1.92 \text{ ft}^3/\text{sk}$ Total Mixing Fluid: 9.77 Gal/sk

Top of Fluid:

4400 ft Calculated Fill: 1456 ft

Volume: 97.48 bbl

Calculated Sacks:

285.35 sks

Proposed Sacks:

290 sks

Fluid 5: First Stage Tail Cement

50/50 Poz Standard

5 lbm/sk Gilsonite (Lost Circulation Additive) 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive) Fluid Weight

13.50 lbm/gal

Slurry Yield:

 $1.30 \text{ ft}^3/\text{sk}$ 

Total Mixing Fluid:

5.20 Gal/sk

Top of Fluid: Calculated Fill:

5856 ft 544 ft

Volume:

38.38 bbl

Calculated Sacks:

166 sks

Proposed Sacks:

170 sks

Fluid 6: Water Based Spacer

Water Displacement

Fluid Density: Fluid Volume: 8.33 lbm/gal 299.96 bbl

Multiple Stage Cementer

Stage 2

Fluid 1: Water Based Spacer

Gelled Water

10 lbm/bbl

Bentonite (Gelling Agent)

Fluid Density:

4400 ft (MD)

8.40 lbm/gal

Fluid Volume:

20 bbl

Fluid 2: Water Based Spacer

Water

Fluid Density:

8.33 lbm/gal

Fluid Volume:

5 bbl

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Laguna Colorado 2-3 #1

Fluid 3: Second Stage Lead Cement Halliburton Light Standard Fluid Weight 12.30 lbm/gal  $1.92 \text{ ft}^3/\text{sk}$ Slurry Yield: 5 lbm/sk Gilsonite (Lost Circulation Additive) Total Mixing Fluid: 9.77 Gal/sk 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive) Top of Fluid: 0 ft Calculated Fill: 3882 ft Volume: 251.97 bbl Calculated Sacks: 737.59 sks Proposed Sacks: 740 sks Fluid 4: Second Stage Tail Cement 50/50 Poz Standard Fluid Weight 13.50 lbm/gal 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive) Slurry Yield:  $1.30 \text{ ft}^3/\text{sk}$ 5 lbm/sk Gilsonite (Lost Circulation Additive) Total Mixing Fluid: 5.20 Gal/sk Top of Fluid: 3882 ft Calculated Fill: 518 ft Volume: 34.68 bbl Calculated Sacks: 150 sks Proposed Sacks: 150 sks Fluid 5: Water Based Spacer Water Displacement Fluid Density: 8.33 lbm/gal Fluid Volume: 207.59 bbl

# Job Procedure

# **Detailed Pumping Schedule**

Fluid #		Fluid Name	Surface Density	Estimated Avg Rate bbl/min	Downhole Volume
Stage 1					
1 '	Spacer	Water	8.3		10 bbl
2	Spacer	Gelled Water	8.4		20 bbl
3	Spacer	Water	8.3		5 bbl
4	Cement	Lead Cement	12.3		290 sks
5	Cement	Tail Cement	13.5		170 sks
6	Spacer	Water Displacement	8.3		299.96 bbl
Stage 2					
1	Spacer	Gelled Water	8.4		20 bbl
2	Spacer	Water	8.3		5 bbl
3	Cement	Lead Cement	12.3		740 sks
4	Cement	Tail Cement	13.5		150 sks
5	Spacer	Water Displacement	8.3		207.59 bbl