UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Sundry 1	Notices and Reports on We	lls
1. Type of Well GAS	SEP 2 0 1993	5. Lease Number SF-078060A 6. If Indian, All. or Tribe Name
2. Name of Operator	OL CON INC	_ 7. Unit Agreement Name
MERIDIAN OIL 3. Address & Phone No. of Ope PO Box 4289, Farmington,	pist. 3	Huerfano Unit 8. Well Name & Number Huerfano Unit #205 9. API Well No.
4. Location of Well, Footage, 1850'FSL, 1850'FEL Sec.28		10. Field and Pool Basin Ft Coal 11. County and State San Juan Co, NM
12. CHECK APPROPRIATE BOX TO		
Type of Submission x Notice of Intent	Type of Adams Abandonment	ction Change of Plans
Subsequent Report	_x_ Recompletion _x_ Plugging Back	New Construction Non-Routine Fracturing
Final Abandonment		Water Shut off Conversion to Injection
13. Describe Proposed or Con	mpleted Operations	
It is intended to plug I Fruitland Coal	back the Dakota and recom per the attached procedu	aplete this well in the are and wellbore diagram.
$\langle A \rangle P_{ij}$	he foregoing is true and (MP) Title Regulatory A	
(This space for Federal or S		AFTING
APPROVED BY CONDITION OF APPROVAL, if an	Title	SEPATE 1993
C-104 F-1 1152 (4)	I there are a second and a second a second and a second a	DISTRICT MANAGER

IMPOS

Form 7-122 Supersedes C-128 Effective 1-1-65

perater		All distances must	be from the o	outer boundaries of	the Section	:	
Meridian			Leaso	RFANO UNIT		(SF-078060-A	.) Well 1. 205
J	28	Townshii 26-N	!+ 1	9-W	-Pounty	SAN JUAN	200
1850	direct from the	SOUTH	, 1	.850		EAST	
ound Level Elev.	Frui		Panel	asin	to no thee		нье ипател Алгеаце;
1. Outline th	e acreage dedic	ated to the subject	well by c	olored pencil or	hachure	marks on the n	320.00 Arrest
2. If more th interest an	an one lease in nd rovalty).	s dedicated to the v	well, outlin	ie each and ider	itify the	ownership there	of (both as to working
3. If more that dated by co	in one lease of ommunitization.	different ownership unitization, force-po	is dedicate	ed to the well, h	nave the	interests of all	owners been consoli-
X Yes		•	(, , , , , , ,		nitiz		
		answer is "yes." typ					
this form if	s no. list the necessary.)	owners and tract de	escriptions ———	which have act	ually be	en consolidated	. (Use reverse side of
No allowab	le will be assign	ned to the well until					
sion.	ing, or otherwise) or until a non-stand	dard unit, e	liminating such	interest	s, has been app	itization, unitization, roved by the Commis-
	1 2 2 2						
]	CE	RTIFICATION ·
•	1 .				Ì	1	that the information con-
galesia Tarak	in the second of the second						s true and somplete to the
1			SEP20			Dear	Smiller
	-+		IL COP	1-01V		Peggy Bra	as: 13
		O	IL CON	3		Peggy DIa	dileid
			(5.0	1		Regulator	y Representat
	1					Meridian	Oil Inc.
777777		SECTION 28		1.		L'ale	8-93
Het of the					ZZN		
	!			i 1	N		y That the well location
	1			1850	Ñ	shown on this p	lat was plotted from field
• :		SF-078060-A		1000	- 1		surveys made by me or
	ĺ	İ		 	N	is true and col knowledge and b	rest to the best of my
	-+		+		1	knowledge and b	eliet.
-	1	2			B		State of the state
	 	2		! 	N	DECEMBER	
•					Ŋ	incuistered i rolesc and/or Laws Jurve	denai i nameea
	† 		,		N		10/11/2
				-	N	Mani	& Value
330 660 90	1320 1650 1980	2310 2640 200	1700	1 1		Cortificate 12.	760

HUERFANO UNIT #205 FRTC FRTC Recompletion J 28 26 9

- 1. Comply to all NMOCD, BLM, & MOI, rules & regulations. MOL and RU P & A rig. Blow well down. NU 6" 900 series BOP with flow tee and stripping head. Test operation of rams. NU blooie line and 2-7/8" relief line.
- 2. Set blanking plug in 2-3/8" tbg @ S.N. @ 6516' & pressure test to 2500 psi. TOH w/210 Jts 2-3/8" tbg. TIH w/cmt ret stinger on 2-3/8" tbg. Circ sand off cmt ret @ 6592', sting into cmt ret, & sq w/12 sx cmt. This will fill perfs & csg below cmt ret w/100% excess cmt. Sting out of ret, reverse out, & TOH.
- 3. Run 4-1/2" csg scraper on tested 2-3/8" tbg to 6382'. TOH. Run 4-1/2" cmt ret. on 2-3/8" tbg & set @ 6382' (50' above top Dakota perf). Est rate & sq Dakota perfs & csg w/12 sx cmt. Sting out of ret, reverse out. Pressure test csg to 1000 psi.
- Spot hole w/ 12 bbl mud: 15# sodium bentonite w/non-fermenting polymer,
 8.4# gal weight, & 40 qs vis or greater. TOH.
- 5. Perf 2 sq holes @ 5602' (50' below top Gallup). W/2-3/8" tbg @ 5502' & pipe rams closed, est rate into sq holes & sq w/39 sx Cl "B" cmt. This will fill behind csg from 5602' to 5502' (50' above top Gallup) w/100% excess cmt. Open pipe rams & spot 12 sx cmt. This will fill inside csg from 5602' to 5502' w/50% excess cmt.
- 6. Spot hole w/ 30 bbl mud: 15# sodium bentonite w/non-fermenting polymer, 8.4# gal weight, & 40 qs vis or greater. TOH.
- 7. Perf 2 sq holes @ 3653' (50' below top Mesaverde). W/2-3/8" tbg @ 3653' & pipe rams closed, est rate into sq holes & sq w/39 sx C1 "B" cmt. This will fill behind csg from 3653' to 3553' (50' above top Mesaverde) w/100% excess cmt. Open pipe rams & spot 12 sx cmt. This will fill inside csg from 3653' to 3553' w/50% excess cmt.
- 8. Spot hole w/ 24 bbl mud: 15# sodium bentonite w/non-fermenting polymer, 8.4# gal weight, & 40 qs vis or greater. TOH & lay down tbg. Release P & A rig.
- 9. MI Wireline Truck w/mast truck. Set top drillable BP @ 2100'. Dump 2 sx sand on top BP. Run CBL from 2100' to top cmt in 4-1/2" csg. Run dual spaced neutron log from 2100'-1800'. Correlate to open hole Induction log. Hot-shot logs to Production Engr Dept before perforating.
- 10. MOL and RU completion rig. NU 6" 900 series BOP with flow tee and stripping head. Test operation of rams. NU blooie line and 2-7/8" relief line. Pressure test to 2500 psi. TIH w/2-3/8" tbg to 2000'. Role hole w/2% KCL water. TOH.
- 11. Perf Lower Fruitland Coal w/ 4 spf. Perfs will be picked by Production Engr Dept (about 1977'-90'). Total ~52-0.50 holes. Perf 3-1/2" w/16 gr Owens DML jets than have a 12.85" penetration in Berea.

JERNIGAN #3A CHACRA COMPLETION PROCEDURE Page 2

- 12. TIH with 4-1/2" pkr on 2-3/8" tbg & set @ 1800'. With 1000 psi on backside, breakdown & attempt to balloff w/1200 gal 15% HCL acid, 2% KCL water, & 120 perf balls. Acid to contain 1 gal/1000 gals of SAA-3 (surfactant) & 2 gals/1000 of C1A-2 (corrosion inhibitor). All fluid to contain 500 scf/bbl N2. Maximum pressure = 2500 psi. Record breakdown pressures. Shut well in for 1 hour.
- 13. Flow well back through choke manifold. Swab well if necessary. Record pitot gauges and water rates. TOH. Run junk basket to retrieve perf balls.

If pitot gauges are above 200 MCF/D omit Lower FRTC frac & go to Step #16. If pitot gauges were less than 200 MCF/D, prepare to frac.

- 14. Spot and fill 2 400 bbl. frac tanks with 2% KCL water. Filter all water to 25 microns. One tank for gel and one for breakdown. Usable water required for frac is 257 bbls.
- 15. Frac Lower Fruitland Coal down csg with 35,000 gals. of 70% quality N2 foam and 45,000# Arizona sand. Pump foam at 35 BPM. Use 10,500 gals. 30# (guar) gel for base fluid. Monitor bottomhole and surface treating pressures, rate, foam quality, & sand concentration, with computer van. Sand to be tagged with 0.4 mCi/1000# Ir-192 tracer. Max. pressure is 2500 psi and estimated treating pressure is 2300 psi. Treat per the following schedule:

<u>Stage</u>	Foam Vol. (Gals.)	Foam <u>Quality</u>	Gel Vol. (Gals.)	Sand Vol. (lbs.)	Sand <u>Mesh</u>
Pad	10,000	70	3,000		
1.0 ppg	10,000	70	3,000	10,000	20/40
2.0 ppg	10,000	70	3,000	20,000	20/40
3.0 ppg	5,000	70	1,500	15,000	20/40
Flush	(0)	<u>70</u>	(1,310)		
Totals	35,000		10,500	45,000#	

Treat frac fluid with the following additives per 1000 gallons:

- * 30# J-4 (Base Gel)
- * 5.0 gals. (Foaming Agent)
- * 1.0 gal. Aqua-Flow (Non-ionic Surfactant)
- * 1.0# B-11 (Enzyme Breaker)
- * 1.0# B-5 (Breaker)
- * 0.35# Frac Cide (Bacteriacide)
- 16. Set 4-1/2" ret BP @ 1970' on wireline. TIH w/2-3/8" tbg, load hole w/2% KCL water, & pressure test to 2500 psi.
- 17. Perf Upper Fruitland Coal w/ 4 spf. Perfs will be picked by Production Engr Dept (about 1940'-55'). Total ~60-0.50 holes. Perf 3-1/2" w/16 gr Owens DML jets than have a 12.85" penetration in Berea.
- 18. TIH with 4-1/2" pkr on 2-3/8" tbg & set @ 1800'. With 1000 psi on backside, breakdown & attempt to balloff w/1200 gal 15% HCL acid, 2% KCL water, & 150 perf balls. Acid to contain 1 gal/1000 gals of SAA-3

JERNIGAN #3A CHACRA COMPLETION PROCEDURE Page 3

(surfactant) & 2 gals/1000 of C1A-2 (corrosion inhibitor). All fluid to contain 500 scf/bbl N2. Maximum pressure = 2500 psi. Record breakdown pressures. Shut well in for 1 hour.

Flow well back through choke manifold. Swab well if necessary. Record pitot gauges and water rates. TOH. Run junk basket to retrieve perf balls.

If pitot gauges are above 200 MCF/D go to end of this procedure (Step #25). If pitot gauges were less than 200 MCF/D, prepare to frac.

- 20. Spot and fill 2 400 bbl. frac tanks with 2% KCL water. Filter all water to 25 microns. One tank for gel and one for breakdown. Usable water required for frac is 257 bbls.
- 21. Frac Upper Fruitland Coal down csg with 35,000 gals. of 70% quality N2 foam and 45,000# Arizona sand. Pump foam at 35 BPM. Use 10,500 gals. 30# (guar) gel for base fluid. Monitor bottomhole and surface treating pressures, rate, foam quality, & sand concentration, with computer van. Sand to be tagged with 0.4 mCi/1000# Ir-192 tracer. Max. pressure is 2500 psi and estimated treating pressure is 2300 psi. Treat per the following schedule:

<u>Stage</u>	Foam Vol. (Gals.)	Foam <u>Quality</u>	Gel Vol. (Gals.)	Sand Vol. (lbs.)	Sand <u>Mesh</u>
Pad	10,000	70	3,000		
1.0 ppg	10,000	70	3,000	10,000	20/40
2.0 ppg	10,000	70	3,000	20,000	20/40
3.0 ppg	5,000	70	1,500	15,000	20/40
Flush	(1,300)	<u>70</u>	(390)		
Totals	35,000		10,500	45,000#	

Treat frac fluid with the following additives per 1000 gallons:

- * 30# J-4
- * 5.0 gals.

(Foaming Agent)

* 1.0 gal. Aqua-Flow (Non-ionic Surfactant)

* 1.0# B-11

(Enzyme Breaker)

* 1.0# B-5

(Breaker)

(Base Gel)

* 0.35# Frac Cide

(Bacteriacide)

- 22. Open well through choke manifold and monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. Take pitot gauges when possible.
- 23. TIH w/retrieving head on 2-3/8" tbg & C.O. w/air/mist to ret BP @ 1970'. When a stable gas gauge is obtained, retrieve ret. BP @ 1970'. TOH.
- 24. TIH w/3-7/8" bit on 2-3/8" tbg & clean out Lower FRTC w/air/mist to 2000'. Take pitot gauges when possible.
- When wellbore is sufficiently clean, TOH and run after frac gamma-ray log from 2000'-1600' (If well was fraced).
- 26. TIH with 2-3/8" production tbg with standard seating nipple one joint

JERNIGAN #3A CHACRA COMPLETION PROCEDURE Page 4

off bottom. Land tbg @ 1950'. Again blow well clean. Take final pitot gauges, water samples, and gas samples.

- 27. ND BOP and NU wellhead. Rig down & release rig.
- 28. Install wellhead compressor.

Approved:

J. A. Howieson

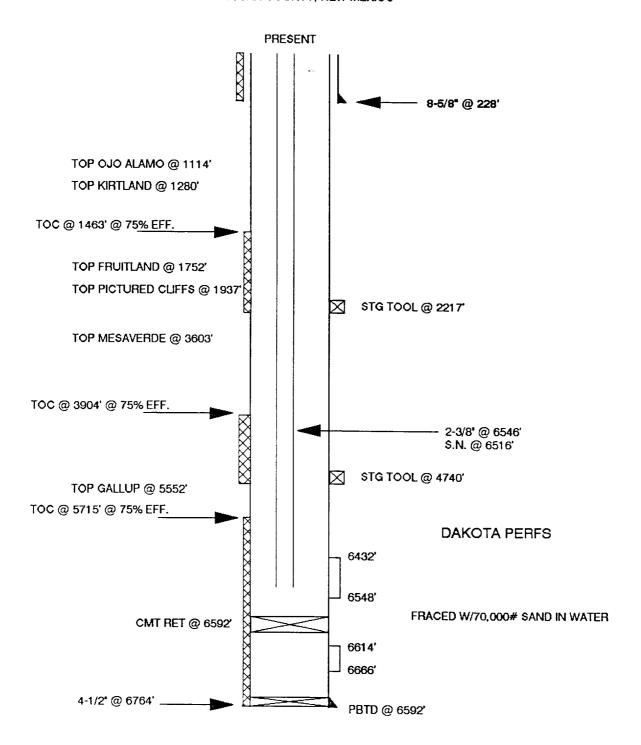
VENDORS:

Wireline: Blue Jet 325-5584 Frac & Acid: Howco 325-3575 Frac & Acid: Howco 325-3575 RA Tagging: Pro-Technics 326-7133

PMP

HUERFANO UNIT #205 DK

UNIT J SECTION 28 T26N R9W SAN JUAN COUNTY, NEW MEXICO



Pertinent Data Sheet - HUERFANO UNIT #205 DK

Location: 1850'FSL 1850' FEL SEC. 28 T26N R09W, SAN JUAN COUNTY, N.M.

Lease: Federal SF 078060-A

<u>Elevation:</u> 6470' <u>TD:</u> 6764'

11'KB <u>PBTD:</u> 6592'

DP#: 52351A GWI: 49.68%

<u>Completed:</u> 7-7-70 <u>GWI:</u> 49.68% NRI: 39.25%

<u>Initial Potential:</u>

AOF=4043 MCF/D, Q=3455 MCF/D, SICP=1971 psi

Casing Record:

Field: Basin Dakota

Hole Size	Csq. Size	Wt.	& Grad	<u>ie</u>	Ī	Depth Set	Ceme	nt	Top/	Cmt	
12-1/4"	8-5/8"	24#	J-55			228'	160	sx	Circ	Cmt	
7-7/8"	4-1/2"	10.5#	KE			6764'	270	sx	5715′@	75%	Eff.
			Stage	Tool	a	4740'	215	sx	3904′@	75%	Eff.
			Stage	Tool	@	2217′	194	sx	1463′@	75%	Eff.
Tubing Record	<u>d:</u> 2-3/8"	4.7#	JS			6546′	210 Jt	s			
				S.N.	a	6516'					

Formation Tops:

Ojo Alamo	1114′
Kirtland	1280′
Fruitland	1752′
Pictured Cliffs	1937′
Mesaverde	3603′
Point Lookout	4390′
Gallup	5552′
Dakota	65241

Logging Record: Induction Log, Density Log.

<u>Stimulation:</u> Perf DK @ 6432'-40', 6470'-74', 6522'-30', 6540'-48', 6614'-22', 6658'-66', w/16 spz & fraced w/70,000# sand in water.

Workover History: 8-4-76: Set cmt ret @ 6592' to isolate lower Dakota from
production. 1-15-86: Swabbed well. Couldn't get below 4400' due to piston.
2-10-87: Swabbed well. 4-10-89: Swabbed well.

Production History: First Delivery = 5-28-74. Cumulative=503 MMCF & 23,410 BO.
Capacity = 0 MCF/D. Bradenhead = ? psi. Tbg pressure = ? psi. Csg pressure = ? psi.
Line Pressure = ??? psi.

Pipeline: EPNG