ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -2040 South Pacheco, Santa Fe, NM 87505



	A	DMINISTRATIVE APPLICATION COVERSHEET
TH	IS COVERSHEET IS N	MANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
Appli	[PC-Poo	IS: [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location] [DD-Directional Drilling] [SD-Simultaneous Dedication] nole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] I Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] NFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Sait Water Disposal] [IPI-Injection Pressure Increase]
	[EOR-Qualif	ied Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
[1]	TYPE OF AI [A]	PPLICATION - Check Those Which Apply for [A] Location - Spacing Unit - Directional Drilling NSL NSP DD DSD AUG 2 5 1998
	Check [B]	One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM
	[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery ☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR
[2]	NOTIFICAT	TION REQUIRED TO: - Check Those Which Apply, or Does Not Apply
L-J	[A]	☐ Working, Royalty or Overriding Royalty Interest Owners
	[B]	☐ Offset Operators, Leaseholders or Surface Owner
	[C]	☐ Application is One Which Requires Published Legal Notice
	[D]	Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
	[E]	☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
	[F]	☐ Waivers are Attached
[3]	INFORMAT	ION / DATA SUBMITTED IS COMPLETE - Certification
Regu appro ORR	lations of the O oval is accurate a I) is common. <u>I</u>	I, or personnel under my supervision, have read and complied with all applicable Rules and il Conservation Division. Further, I assert that the attached application for administrative and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI understand that any omission of data (including API numbers, pool codes, etc.), pertinent required notification is cause to have the application package returned with no action taken.

Print or Type Name Signature Title Date

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.



SAN JUAN DIVISION

August 20, 1998

Federal Express

Mr. Michael Stogner New Mexico Oil Conservation Division 2040 South Pacheco Street Santa Fe. New Mexico 87505

Re:

Canyon Largo Unit #388

2040'FSL, 1525'FWL, Section 3, T-25-N, R-6-W, Rio Arriba County

30-039-25277

Dear Mr. Stogner:

This is a request for administrative approval for a non-standard gas well location in the Otero Chacra pool.

Burlington Resources intends to plug and abandon the Blanco Mesa Verde pool in the Canyon Largo Unit #388 and recomplete in the Otero Chacra pool . A cast iron bridge plug will be set at 5240' above the directionally drilled section (see attached wellbore diagram) and cement placed on the bridge plug to plug and abandon the Mesa Verde.

Production from the Otero Chacra is included in a 160 acre gas spacing unit comprising of the southwest quarter (SW/4) of Section 3. This well was originally drilled and completed in the Blanco Mesa Verde pool under Order R-9911, which included the non-standard location and the horizontal drilling to 2462'FSL, 683'FEL in Section 3, T-25N, R-6-W.

To comply with the New Mexico Oil Conservation Division rules, we are submitting the following for your approval of this non-standard location:

- 1. C-102 plat showing location of the well;
- 2. Copy of Well Completion Log for original completion;
- 3. Plat showing offset owners/operators Burlington is the offset operator;
- Order R-9911

Please let me know if you have any questions concerning this application.

Sincerely yours,

Peggy Bradfield

Regulatory/Compliance Administrator

xc: New Mexico Oil Conservation Division – Aztec Bureau of Land Management – Farmington

Shallbuld

Dureau or Land Management - Familington

20 20 - 20 Hopbs, NM 88241-1980

State of New Mexico Energy, Minerals & Natural Resources Deba

Form C-102
Revised February At. 1904
Instructions on Sack
Submit to Appropriate District Office
OETVAL State Lease - 4 Cooles
Fee Lease - 3 Cooles

OIL CONSERVATION DIVISION CENTER PO Box 2088 Santa Fe. NM 37504-2088

Unstructure INT 1900 Pd., Aztec. NM 87410

District 1/ =0 5-7 1000 Senta Fe NM 87504-2088

93 JUL 14 AM 9: 36 AMENDED PEPORT

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30-039-252	.77 823	29/72319		cra/Blanco		
* Spenty Code	i		Enty Name _ARGC_UNIT			Well Number 388
6886			ator Name			Elevation
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	2040	20400	2462	Date of	Survey Survey	Wa

UNITED STATES BUREAU OF LAND MANAGEMENT

è	FOR APPROVED OMB NO. 1004-0137
er in-	Expires: December 31, 19
in on	5. LEASE DESIGNATION AND

SUBMIT IN DU DEPARTMENT OF THE INTERIOR RECEINVENER 991 BERIAL NO. DI 12 SE-078885 6. IF INDIAN, ALLOTTEE OR TRIBE HAME WELL COMPLETION OR RECOMPLETION REPORT, AND LOG.* 1a. TYPE OF WELL: OIL. W.R.L.L 7. UNIT AGREEMENT NAME Other L TYPE OF COMPLETION: Canvon Largo Unit FARM OR LEASE NAME, WELL NO. DIFF WORK OVER DEED-MEM. 2. NAME OF OPERATOR Canyon Largo Unit #388 9. API WELL NO. Much Meridian Oil Inc 3. ADDRESS AND TELEPHONE NO. 30-039-25277 10. FIELD AND POOL, OR WILDCAT PO Box 4289 Farmington Nº 37499 (505) 326-9700
4. LOCATION UP WELL (Report location clearly and in accordance with any State requirements) Blanco Mesaverde
11. SEC., T., R., M., OR BLOCK AND SURVEY
OR AREA At surface 2040'FSL, 1625'FWL At top prod. interval reported below At total depth 2462 FSL, 683 FEL DD R-9911 Sec 3, T-25-N, R-6-W DATE ISSUED 12. COUNTY OR 13. STATE 14. PERMIT NO. Sec 3, T-25-N, R-6-WPARISH Rio Arriba NM 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 19. ELEY, CARINGHEAD 15. DATE SPUDDED 18. ELEVATIONS (DF. RKB, RT, GR. ETC.)* 2-25-94 8-27-93 9-14-93 6741 GR 22. IF MULTIPLE COMPL., HOW MANY 21. PLUG, BACK T.D., MD & TVD 23. INTERVALS ROTARY TOOLS CABLE TOOLS 20. TOTAL DEPTH, MD & TVI DRILLED BY 0-5404 5404-MD 5100 TVD 25. WAS DIRECTIONAL SURVEY MADE 24. PRODUCING INTERVAL(8), OF THIS CONFLETION-TOP, BOTTOM, NAME (MD AND TVD) 5190-5196 Mesaverde 27. WAS WELL CORED 26. TYPE ELECTRIC AND OTHER LOGS BUN GR No CASING RECORD (Report all strings set in well) 29 HOLE BIZE FOP OF CEMENT, CEMENTING RECORD CASING SIZE/GRADE WEIGHT, LR./PT DEPTH SET (MD) AMOUNT PULLED 5/8 226 12 1/4 236 cu.ft. 9 36# 23# 5335 1753 cu.ft. 30 TUBING RECORD LINER RECORD RIZE DEPTH SET (MD) BIZE TOP (MD) SOTTOM (MD) SACKS CEMENT* SCREEN (MD PACKER SET (MD) 2 7/8 5220 31. PERFORATION RECORD (Interval, size and number) 82. ACID. SHOT. FRACTURE, CEMENT SQUEEZE, ETC. AMOUNT AND KIND OF MATERIAL USED None 5190-5196 22. PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping-eize and type of pump) DATE FIRST PRODUCTION WELL STATUS (Producing or shut-in) Flowing PROD'N. FOR DATE OF TRET HOURS TESTED OIL-BBL. GAR-MCF WATER-BBL GAS-OIL BATIO CHOKE SIZE TEST PERIOD 11-30-93 **TSTM** 3/4 GAS-MCF. WATER--REL FLOW. TURING PRODU CALCULATED OIL GRAVITT-API (CORR.) CASING PRESERVE OIL-BAL. 24-HOUR BATE SI-492 TSTM 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY To be Sold 35. LIST OF ATTACHMENTS None and attached information is complete and correct as determined from all available reports OR RECORD 36. I hereby certify that the foregoing

SIGNED

TITLE Regulatory Affairs

DATE 8-24-94

*(See Instructions and Spaces for Additional Data on Reverse Side)

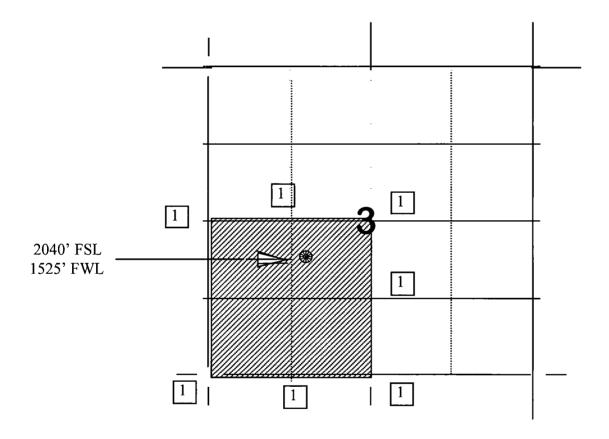
BURLINGTON RESOURCES OIL AND GAS COMPANY OFFSET OPERATOR/OWNER PLAT

Canyon Largo Unit #388

Non Standard Location

Chacra Formation Well

Township 25 North, Range 6 West



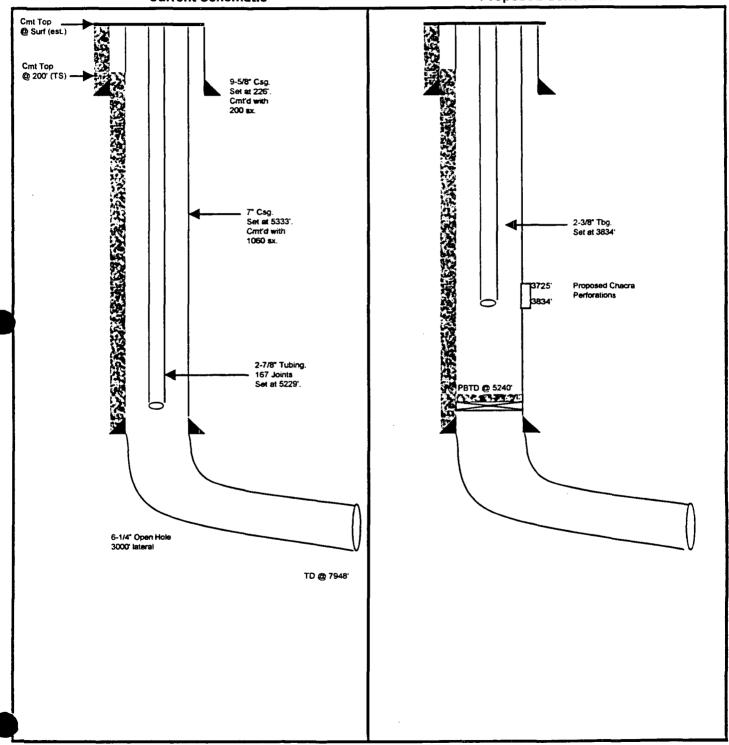
1) Burlington Resources

Canyon Largo Unit #388

Lat: 36° - 25.59816'/Long: 107° - 27.46032' Unit K, Section 3, T25N, R6W Rio Arriba County, NM

Current Schematic

Proposed Schematic



Pool Rules -pac.

STATE OF NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 10729 Order No. R-9911

APPLICATION OF MERIDIAN OIL INC.
FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL
DRILLING PILOT PROJECT, SPECIAL OPERATING
RULES THEREFOR, A SPECIAL PROJECT GAS
ALLOWABLE AND A NON-STANDARD GAS SPACING
AND PRORATION UNIT, RIO ARRIBA COUNTY,
NEW MEXICO.



OIL CON. DIV

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 20, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 10th day of June, 1993, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Meridian Oil Inc., seeks authority to initiate a high angle/horizontal directional drilling pilot project in the Blanco-Mesaverde Pool underlying all of Section 3, Township 25 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, thereby creating a non-standard 642.52-acre gas spacing and proration unit for said pool.
- (3) The applicant proposes to drill its Canyon Largo Unit Well No. 388 from a standard surface location 2040 feet from the South line and 1625 feet from the West line (Unit K) of Section 3 in the following unconventional manner:

Drill vertically to a depth of approximately 4,707 feet, kick off from the vertical at this depth and drill in an east-northeast direction building angle to approximately 88 degrees so as to penetrate the upper portion of the Point Lookout formation at a true vertical depth of approximately 5,095 feet. Continue drilling horizontally a distance of approximately 2,600 feet.

(4) The applicant further seeks:

- a) the adoption of special operating provisions and rules within the pilot project area including the designation of a prescribed area limiting the horizontal displacement of said well's producing interval such that it can be no closer than 790 feet from the outer boundary of Section 3;
- b) approval of a 642.52-acre non-standard gas spacing and proration unit comprising all of Section 3;
- c) a special project gas allowable calculated by utilizing an acreage factor of 2.0 in the gas allowable formula.
- (5) The proposed well is located within the boundaries of the Blanco-Mesaverde Pool and is therefore subject to the Special Rules and Regulations for said pool and the General Rules for the Prorated Gas Pools of New Mexico, both contained within Division Order No. R-8170, as amended.
- (6) According to applicant's geologic evidence, the proposed well is located at the southwest edge of the Blanco-Mesaverde Pool. The proposed well is designed to test the effectiveness of horizontal drilling in recovering gas from an area of the pool which has limited potential for gas recovery from conventional vertical wellbores.
- (7) The potentially productive zone in the subject wellbore is the Point Lookout interval. The Point Lookout interval is characterized by natural fractures oriented in a north-northeast south-southwest direction.
- (8) Through its evidence and testimony, the applicant demonstrated that the proposed horizontal wellbore should encounter a substantially greater number of natural fractures within the Point Lookout interval than would a conventional wellbore, which should substantially increase the productivity of the subject well and which should ultimately result in the recovery of a greater amount of gas from the proposed project area, thereby preventing waste.

- (9) The evidence further indicates that the subject wellbore, which should traverse both the W/2 and E/2 of Section 3, should effectively drain and develop all of Section 3.
- (10) There is currently no other wellbore in Section 3 producing from the Blanco-Mesaverde Pool.
- (11) The proposed well is located within the Canyon Largo Unit, a federal exploratory unit formed in 1953 which is currently operated by the applicant.
 - (12) The applicant is the only working interest owner in Section 3.
- (13) Merrion Oil and Gas Corporation and Robert Bayless, the only two offset operators, were notified of the application in this case and did not appear at the hearing in opposition.
- (14) No offset operator and/or interest owner appeared at the hearing in opposition to the application.
- (15) The aforementioned prescribed area limiting the horizontal displacement of the wellbore would allow for flexibility, serve to minimize risk, maximize the success of such a completion, and would serve to protect correlative rights.
- (16) In the interest of conservation, prevention of waste, and protection of correlative rights, the application of Meridian Oil Inc. for a high angle/horizontal directional drilling project should be approved.
- (17) The subject well and project area should be assigned a gas allowable calculated by utilizing an acreage factor of 2.0 in the gas allowable formula for the Blanco-Mesaverde Pool.
- (18) The applicant should be required to determine the actual location of the kick-off point prior to commencing directional drilling operations. Also, the applicant should be required to conduct a directional survey on the lateral portion of the wellbore during or after completion of drilling operations.
- (19) The applicant should notify the supervisor of the Aztec district office of the Division of the date and time of conductance of any directional surveys in order that the same may be witnessed.
- (20) The applicant should be required to submit copies of all directional surveys conducted on the subject well to both the Santa Fe and Aztec offices of the Division.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Meridian Oil Inc., is hereby authorized to initiate a high angle/horizontal directional drilling pilot project in Section 3, Township 25 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, by drilling its Canyon Largo Unit Well No. 388 from a standard surface location 2040 feet from the South line and 1625 feet from the West line (Unit K) of Section 3 in the following unconventional manner:

Drill vertically to a depth of approximately 4,707 feet, kick off from the vertical at this depth and drill in an east-northeast direction building angle to approximately 88 degrees so as to penetrate the upper portion of the Point Lookout formation at a true vertical depth of approximately 5,095 feet. Continue drilling horizontally a distance of approximately 2,600 feet.

PROVIDED HOWEVER THAT, no portion of the horizontal portion of the wellbore shall be located closer than 790 feet from the outer boundary of the project area.

- (2) All of Section 3 shall be dedicated to the above-described well forming a non-standard 642.52-acre gas spacing and proration unit, also hereby approved.
- (3) The subject well and project area shall be assigned a gas allowable calculated by utilizing an acreage factor of 2.0 in the gas allowable formula for the Blanco-Mesaverde Pool.
- (4) The applicant shall determine the actual location of the kick-off point prior to commencing directional drilling operations. Also, the applicant shall conduct a directional survey on the lateral portion of the wellbore during or after completion of drilling operations.
- (5) The applicant shall notify the supervisor of the Aztec district office of the Division of the date and time of conductance of any directional surveys in order that the same may be witnessed.
- (6) The applicant shall submit copies of all directional surveys conducted on the subject well to both the Santa Fe and Aztec offices of the Division.
- (7) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. JEMAY Director

SEAL

CMD : OG5SECT

ONGARD INQUIRE LAND BY SECTION 09/02/98 08:57:42 OGOIV -EMDY

PAGE NO: 2

Sec : 03 Twp : 25N Rng : 06W Section Type : NORMAL

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CMD : OG6ACRE

ONGARD C102-DEDICATE ACREAGE 09/02/98 08:58:23

OGOIV -EMDY Page No: 1

API Well No : 30 39 25277 Eff Date : 07-30-1998

Pool Idn : 82329 OTERO CHACRA (GAS)
Prop Idn : 6886 CANYON LARGO UNIT

: 6886 CANYON LARGO UNIT Well No: 388

Spacing Unit : 50810 OCD Order : Simultaneous Dedication:

Acreage : 160.00 Revised C102? (Y/N) : Sect/Twp/Rng :

Dedicated Land:

S Base U/L Sec Twp Rng Acreage L/W Ownership Lot Idn _____ 3 25N 06W 40.00 N FD3 25N 06W 40.00 N L FD 3 25N 06W 40.00 N FD N 3 25N 06W 40.00 N FD

E0043: Record found; Authority denied to MODIFY/ADD

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM PF07 BKWD PF08 FWD PF09 PF10 LAND PF11 NXTSEC PF12 RECONF

CMD : OG6IWCM

ONGARD INQUIRE WELL COMPLETIONS

09/02/98 08:58:16 OGOIV -EMDY

Pool Idn : 82329 OTERO CHACRA (GAS)

OGRID Idn : 14538 BURLINGTON RESOURCES OIL & GAS CO Prop Idn : 6886 CANYON LARGO UNIT

Well No : 388 GL Elevation: 6741

U/L Sec Township Range North/South East/West Prop/Act(P/A)

___ ___ ____

B.H. Locn : K 3 25N 06W FTG 2040 F S FTG 1625 F W P

Lot Identifier:

Dedicated Acre: 160.00

Lease Type : F

Type of consolidation (Comm, Unit, Forced Pooling - C/U/F/O) :

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 PF07 PF08 PF09 PF10 NEXT-WC PF11 HISTORY PF12 NXTREC

., Form 3160-4

UNITED STATES DEPARTMENT OF THE INTERIOR OF IVED

BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

FOR APPROVED OMB NO. 1004-0137

OIND 110: 1004-010)
Expires: December 31, 1991
5. LEASE DESIGNATION AND SERIAL NO.
SF-078885
6. IF INDIAN, ALLOTTEE OR TRIBE NAME

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*(See Instructions and Spaces for Additional Data on Reverse Side)
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department of agency of the 1 9 1998 United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

					_	
TRUE VERT. DEPTH	MEAS. DEPTH	2				,
Ť	TOP	-	DESCRIPTION, CONTENTS, ETC.	BOTTOM	401	FORMATION
	GEOLOGIC MARKERS		drill-stem, tests, including depth interval tested, cushion used, time tool open, floring and shut-in pressures, and secured s	lerval tested, cus	cluding depth in	drill-stem, tests, in receveries):

Ojo Alam o	2158' 2390'	White, cr-gr ss.		
Kirtland	2390' 2615'	Gry sh interbedded w/tight, gry, fine-gr ss.		
rruitland	2615' 2855'	Dk gry-gry carb sh, coal, grn silts, light- med gry, tight, fine gr ss.	Ojo Alamo Kirtland	2150' 2390'
			Fruitland	2615'
Pictured Cliffs	28551 29001	Bn-Gry, fine grn, tight ss.	Pic.Cliffs Mesa Verdo	2055' 4515'
			Menefee Pt.Lookout	4530° 5073°
Mesa Ve rde	4515' 4530'	Med-dark gry, fine gr 55, carb sh & coal	v	
Menefee	4530' 5073 '	Med-dark gry, fine gr ss, carb sh & coal		
Point Lookout	5073'	<pre>Med-light gry, very fine gr ss w/frequent sh breaks in lower part of formation</pre>		·

UNITED STATES

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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	SEC.	E I V L I	
Sundry Notice	es and Reports on Wells		,
1. Type of Well GAS		5 77 4 3.1 MOTON, 681	Lease Number SF-078885 If Indian, All. or Tribe Name
		7.	Unit Agreement Name
2. Name of Operator	2(6)	EUVEN	
RESOURCESN OIL 6	GAS COMPANY		Canyon Largo Unit
	- WO -	2 1 1958 8.	Well Name & Number
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM	r 87499 (505) 326-9 <u>元00</u> <u>C</u> ①	N. DIY.	Canyon Largo U #388 API Well No.
4. Location of Well, Footage, Sec	., t, r, m	元3 _{10.}	30-039-25277 Field and Pool
2040'FSL, 1625'FWL, Sec.3, T-2		11.	Otero Cha/Blanco MV County and State Rio Arriba Co, NM
12. CHECK APPROPRIATE BOX TO INDI	CATE NATURE OF NOTICE, RE	PORT, OTHER	DATA
Type of Submission Notice of Intent	Type of Action Abandonment C	Thange of Pla	ans
	X Recompletion N	lew Construct	ion
X Subsequent Report		on-Routine E ater Shut of	
Final Abandonment	Altering Casing C		
13. Describe Proposed or Comple	ted Operations		· · · · · · · · · · · · · · · · · · ·
TOOH. TIH w/7" CI TOC @ 1100'. Ran 7-24-98 TIH w/6 %" bit to Coon CIBP, lost cir 7-25-98 TOOH. TIH w/CIBP, s TOOH to 3850'. Ci TIH, perf lower Coon 3839, 3840, 3842' HCl. SD for Sunda	to set CIBP @ approximate BP, set @ 5143'. TOOH. TOOK CNL-GR @ 3000-4000'. TOOK CIBP @ 5143'. Push CIBP to Get @ 5202'. Pump 9 sx Clarc hole clean. Spot 300 chacra w/2 SPF @ 3729, 37 w/20 0.3" diameter hole ay. w/434 bbl 25# linear gel,	ely 5205' fr IH ran CBL-C H. SDON. o 5203'. Est ill to 5321' ass "B" neat gal 15% HCl 31, 3734, 37 s total. Aci	om Steve Mason, BLM) CL-GR @ 740-5143', ablish circ. Drill . SDON. cmt on top of CIBP. @ 3677-3850'. TOOH. 35, 3736, 3739, 3746 dize w/1000 gal 15%
	el break. CO after frac.		
7-30-98 Blow well & CO. TOO ND BOP. NU WH. RI		4.7# J-55 EU	E tbg, landed @ 3851
Well will produce as a single	Chacra. The Mesaverde for	rmation is pl	lugged and abandoned
14. I hereby certify that the f	oregoing is true and corr	ect.	
Signed James Drad huld	Title Regulatory Admini	strator Date	= 8/3/98
(This space for Federal or State APPROVED BY	Office use) Title	Date	to ton hecure
CONDITION OF APPROVAL, if any:	·	_	UG 1 9 1998

submitted in lieu of Form 3160-5

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

	WE 1.1		
Sundry Notices and Reports on We	dlis 14 AM 9:	36	
	FACALOGION, I	5.	Lease Number SF - 078885 If Indian, All. or Tribe Name
	_ _	7.	Unit Agreement Name
2. Name of Operator			Canyon Largo Unit
BURLINGTON RESOURCES OIL & GAS COMPANY			
3. Address & Phone No. of Operator		8.	Well Name & Number Canyon Largo Unit #388
PO Box 4289, Farmington, NM 87499 (505) 326-9700	0	9.	
4. Location of Well, Footage, Sec., T, R, M		10.	Field and Pool Blanco MV/Otero Chacra
2040' FSL, 1625' FWL, Sec. 3, T-25-N, R-6-W, NMPN	, 1	11.	County and State Rio Arriba Co, NN
12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTIC		THER	DATA
Type of Submission Type of A _X Notice of Intent X Abandonment	Action Change c	f Pla	ans
X_ Recompletion	New Cons	truc	tion
Subsequent Report Plugging Back			
Casing Repair Final Abandonment Other			o Injection
13. Describe Proposed or Completed Operations			
It is intended to recomplete the subject well and plug and abandon the Mesaverde form procedure and wellbore diagram.	green crosses of the contract		
	DEGE!]V[
		/ 1530	j +
	MOD 1110 June 1		
14. I hereby certify that the foregoing is true and	d correct.		
Signed Signed State Mild Title Regulatory	Administrator		
(This space for State Office use) APPROVED BY Title	Dat	VKI	<u>IUL 5 1998</u>
CONDITION OF APPROVAL, if any:			
Hold 6-104 FOR NSL @			

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Jistrali (1		NM 88211-0719 ztec. NM 87410		PO 8:	ATION DIV DX 2088 M 37504-2		State	te District Office Lease – 4 Copies Lease – 3 Gopies
		NM 87504-2088	Э¢	nnta Te. N	98 JÜ	L14 M 9:3		ENDED REPORT
		WE!			ACREAGEOD	EDICATION Pool	<u></u>	
	39-252	1	**************************************)	Otero C	hacra/Blan		erde
6886					ty Name ARGC UNIT			*Well Numper 388
1453		301	RLINGTON		or Name ES OIL &	GAS JOMPAN	Y	*Elevation 5741
		······································		¹⁰ Sui face				
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1	1625	NOT RESUR A PLAT D NEALE C	ATED 3 2 EDWARDS	6-93 BY	FROM MOHAL M	Signa Pegg Print Regu Title Date 1 Pegg Title Date	AVEYOR CE THE BEST OF MY DES	dministrato

Canyon Largo Unit #388

Chacra Recompletion Procedure
Unit K, Section 3, T25N, R6W
Lat: 36° - 25.59816'/ Long: 107° - 27.46032'

It is intended to recomplete the Chacra in this shut in Mesaverde completion. The Chacra will be sand fracture stimulated in a single stage with a total of 82,000 lbs 20/40 sand using a 70Q 25 lb linear gel for transport.

Canyon Largo Unit #388 is currently a 1998 demand well.

- 1. Inspect location and test rig anchors, if necessary. Comply with all NMOCD, BLM, Forestry & BR rules and regulations. Dig flowback pit or set flowback tank. Haul to location a 4100' inspected 2-3/8" tubing string, 5 joints 2-7/8" tubing and 3, 400 bbl frac tanks.
- 2. MIRU. Record and report SI pressures on tubing, casing and bradenhead. Fill frac tanks with 2% KCL. Lay blowdown line. Blow well down and kill with 2% KCL water as necessary. ND WH and NU BOP with flow tee and stripping head. Test operation of rams. NU blooie line and 2-7/8" relief line.
- 3. TOOH with 2-7/8", 6.5 lb/ft Mesaverde production string set at ± 5229'. Stand back 2-7/8" production string.
- 4. RU logging company. Run gauge ring for 7", 23 lb/ft casing to 5300'. RIH with 7" CIBP and set at 5290'. Fill casing. Run GR-CBL-CCL from PBTD to top of cement with 1000 psi surface pressure. Bleed off pressure. Run GR-CNL log from 4000 to 3000'. Evaluate CBL and send log copies to drilling and production. Good cement bond must exist across Chacra (3600-3900') to continue. RD logging company.
- 5. RIH with 7" packer and 2 joints of 2-7/8". Set packer for wellhead isolation. Pressure test casing and CIBP to 4000 psi (90% burst). Bleed off pressure. Release packer and TOOH. TIH with open ended 2-7/8" tubing string to top of CIBP. PU additional 2-7/8" joints as needed.
- 6. RU pumping contractor. Spot 9 sx cement (~50') on top of CIBP. PUH and reverse circulate tubing clean. PUH to 3840' and spot 300 gals 15% HCL across Chacra perf interval 3725-3840'. RD pumping contractor. TOOH. LD 2-7/8" tubing pulled from well. Stand back one 2-7/8" stand for wellhead isolation.

All acid on this well to contain the following additives per 1000 gals.

2 gal	HAI-81M	Corrosion inhibitor
5 gal	FE-1A	Iron Control
5 gal	FE-2A	Iron Control
1 gal	SSO-21	Surfactant
1 gal	Cla Sta XP	Clay control

7. **Contact J. L. Dobson at 599-4026 to confirm perforation depths**. Perforation depths may change based on the GR-CNL.

8. RU wireline services. RIH with 3-1/8" select fire carrier guns loaded with Owens 3125306P HSC 12 gm charges set at 2 SPF. (Av. perf diameter - 0.30", Av. pen. -17.48" in concrete). Perf the lower Chacra with 20 holes from top down. RD wireline services.

3725', 3727', 3729', 3734', 3736', 3738', 3742', 3825', 3832', 3834'

- 9. RIH with 7" packer and 2 joints 2-7/8" tubing for wellhead isolation. Set packer.
- RU stimulation company. Hold a tailgate safety meeting. Pressure test surface treating lines to 5000 psi. Breakdown Chacra with 1000 gals 15% HCL acid. Evenly space 40, 7/8" 1.3 sp gr RCN perf balls throughout the job for diversion. Attempt to ball off to 3800 psi. Record ISIP. Use same acid additives as in Step 6. RD stimulation company.
- 11. Release packer and TOOH. RU wireline. RIH with junk basket to PBTD. Record recovery and number of hits. RD wireline. TIH with 7" packer and 2 joints 2-7/8" tubing for wellhead isolation. Set packer.
- 12. RU stimulation company. Maximum surface treating pressure is 4000 psi. Fracture stimulate Chacra down the 7" casing with 55,000 gals of 70 quality foam using 25 lb linear gel as the base fluid and 82,000 lbs 20/40 Arizona sand. Pump at 50 BPM. Monitor surface treating pressures, rate, foam quality and sand concentration with computer van. Sand is to be tagged with 3 RA tracers. Estimated treating pressure is 3186 psi. Estimated casing friction is negligible. Treat per the following schedule:

Stage	Downhole Foam Volume (gals)	Clean Gel Volume (gals)	N2 Volume (MSCF)	Sand Volume (lbs)
Pad	10,000	3,000	161.0	
0.5 ppg	4.000	1,200	64.3	2,000
1.0 ppg	10,000	3,000	160.8	10,000
2.0 ppg	10.000	3,000	160.6	20,000
3.0 ppg	10.000	3,000	160.5	30,000
4.0 ppg	5.000	1,500	80.2	20,000
Flush	5,994	1,798	96.5	0
Totals	54,994	16,498	883.9	82,000

Treat frac fluid w/ the following additives per 1000 gallons:

* 0.18 lb/M	BE-6	Biocide
* 6.25 gal/N	LGC-8	Gel
* 5.0 gal/M	AQF-2	Foamer
* 1.0 gal/M	SSO-21	Surfactant
* 0.5 lb/M	GBW-3	Breaker
* 0.5 lb/M	SP	Breaker

Shut well in after frac and record ISIP, 5, 10 and 15 shut-in pressure. RD stimulation company.

13. Flow well back after 30 minutes to 1 hour through a choke manifold. Open well to pit, starting with a 10/64" choke. If minimal sand is being produced, change to a larger choke size (16/64"). If choke plugs off, shut well in and remove obstruction from choke and return to flowback. Continue increasing choke size and cleaning well up until fluid returns

Canyon Largo Unit #388 1998 Discretionary Chacra Recompletion

are negligible. Once pressures allow, release packer and TOOH. LD 2-7/8" tubing and packer.

- 14. PU and TIH with notched collar on 2-3/8" tbg. Blow well clean with air/mist to 4000'. PUH and continue to alternate between natural flow and blow periods for clean up. **Obtain pitot gauges when possible**. Continue to blow well clean with air/mist until water production is less than 1 BPH and sand production is a trace or less. TOOH.
- 15. Rabbit and TIH with an expendable check, one joint 2-3/8" tubing, standard seating nipple and remaining 2-3/8" tubing. Tag 4000' for sand fill up. If needed, circulate sand off bottom with air. PUH and land tubing at bottom perforation. ND BOP. NU WH. Pump off expendable check. Contact Production Operations for well tie-in. RDMO.
- 16. RU Pro-Technics. Run After-Frac log from 3850-3700'. RD Pro-Technics.

Recommended:

Production Engineer

Approved:

Approved:

Team Leader

VENDORS:

Fracturing: Wireline:

Dowell

325-5096

RA Tag:

Basin Pro-Technics 327-5244 326-7133

Jennifer Dobson

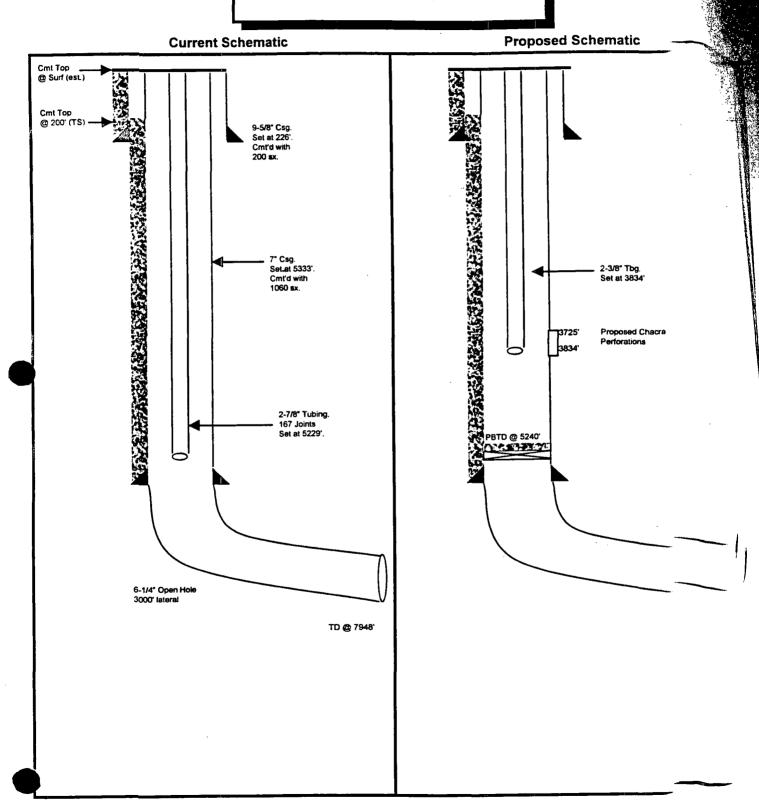
599-4026 (work)

564-3244 (home)

324-2461 (pager)

Canyon Largo Unit #388

Lat: 36° - 25.59816'/Long: 107° - 27.46032' Unit K, Section 3, T25N, R6W Rio Arriba County, NM



UNITED STATES

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT RECEIVED

Sundry Notion	ces and Reports on Wells 98 APR -9 PM 1:1	6	
		5.	Lease Number
	070 FAFES HARVESTON: NI		SF - 078885
. Type of Well GAS	070 FARMINGTON, N	^W 6.	If Indian, All. or Tribe Name
		7.	Unit Agreement Name
. Name of Operator			Canyon Largo Unit
RESOURCES N	: GAS COMPANY		
	- GAS COMPANI	8.	
. Address & Phone No. of Operator PO Box 4289, Farmington, NM		9.	Canyon Largo Unit #3 API Well No.
			30-039-25277
. Location of Well, Footage, Sec. 2040' FSL, 1625' FWL, Sec. 3		10.	Field and Pool Blanco Mesaverde
		11.	County and State Rio Arriba Co, NM
3. Describe Proposed or Compl. It is intended to recomple during 1998.	eted Operations te the subject well in the Chac	era for	mation
during 1998.			
	BROEIWE		
	7 7 AM 2 7 (998)		
		7. 7.	
4. I hereby certify that the	foregoing is true and correct.		· ·
1 8	Title Regulatory Administrat		
This space for Todare Wospensee	Office use)	vk	
PPROVED BY	TitleI	Date _	APR 24 1998
ONDITION OF APPROVAL, if any:	LA Plat		
Hel-19 C-104 Fall 1899	(E)		

District 1 PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico

Form C-104 Revised February 21, 1994

District II P.O Drawer DD, Artesia, NM 88211-0719

Energy, Minerals, & Natural Resources Department

Instructions on back Submit to Appropriate District Office 5 Copies

District III 1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION PO Box 2088

District IV PO Box 2088, Santa					Santa Fe, NN						DED REPORT
<u>I.</u>	REC	QUEST I			BLE AND A	UTHORIZ.	ATION T	ΓΟ TRA			· · · · · · · · · · · · · · · · · · ·
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	ington		es Oil	. & Gas					3 Read	14538 son for Filing Cod	le .
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						127				- 7/11/96	5
	*API No 30-039-			BLA	Poo NCO MESAVI	l Name ERDE (PROF	RATED	İ		Pool Code 72319	
						AS					
	⁷ Property 0068					rty Name ARGO UNIT			9	Well Number #388	
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III. Oil an	d Gas Tr	ansnortei					I				
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V. Well C 25 Spt VI. Well C 34 Date New Of 40 Choke Size 46 I hereby cert	Completion and Date Test Data if y that the ru	a 33 Gas Deliver	26 Ready	36 Test D 42 Water	Date	37 Test Length 43 Gas	² Depth Set	28 PBTD 28 PBTD 38 Tbg. Press	sure	33 Sacks Ce	ressure
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V. Well C 25 Spt VI. Well C 26 Spt VI. Well C 27 Spt VI. Well C 28 Spt VI. Well C 28 Spt VI. Well C 29 Choke Size 40 Choke Size 40 Choke Size 40 I hereby cert with and that the knowledge and that the knowledge and the control of the	Test Data if that the ru he information	a 33 Gas Deliver 41 Oil on given above	26 Ready	36 Test D 42 Water	Date	37 Test Length 43 Gas	Depth Set OIL CO	28 PBTD 28 PBTD 38 Tbg. Press	Sure	39 Peri	ressure
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Form 3160-4 (October 1990)		1 12	NITED	STAT	rec	SUB	MIT IN	DUPLICA	TE•			PROVED . 1004-0137
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WELL CO	MPLETIO	N OR	RECO	MPLETI	ON F	REPORT	17.5	$\overline{}$	3 *	6. IF INDIA	N, ALLO	TIBE OR TRIBE HAM
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	an Oil In	с								9. API WEL	n_Lai LNO.	rgo Unit #38
3. ADDRESS AND	TELEPHONE	NO.								30-03	9_252	277 L. OR WILDCAT
4. LOCATION OF WE	4289 Fa	rming	riy and in	1 37490 accordance	with an)5) 32 y State reg	6-970	() (e) •		-		
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At total depth	2462'FSL.	683'1	FEL '	DD	R-991	11			_			-N, R-6-W
	Sec 3, T-2			14. PE	BMIT NO.		DATE	188UED		12. COUNTY PARISH		13. STATE
15. DATE SPUDDED	16. DATE T.D.	REACHE	D 17. DAT	E COMPL. (Ready to	prod.)	18 2122	ATIONS (D		Rio Ar		NM ELEV. CASINGHEAD
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20. TOTAL DEPTH, MD	A TVD 21. P	LUG. BACI	K T.D., MD A	TVD 22.	HOW N	TIPLE COMI	PL.,	23. INTI	LED BY	ROTARY TO	OLS	CABLE TOOLS
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5190-5196	Mesaverde	<u>.</u>										BURVEY MADE
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									7/8	5229		
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88.*			3T. I		PRO	DUCTION			<u>'</u>			
DATS PIRST PRODUCT	ION PRO	DUCTION	METHOD (_	wing	um ping—si	se and t	ype of pur	np)		tut-in)	ST
DATE OF TEST	HOURS TESTE	D C	HOEB SIZE	PROD'I	V. FOR PERIOD	OIL-BBI	••	GAS-N		WATER-B		GAS-OIL BATIO
11-30-93	CASING PRESS	ERE C	3/4	011,	 _	GAS	-MCF.	TSTM	WATER	HRI.	1 011. (RAVITT-API (CORE.)
	SI-492		4-HOUR RAT			1	TSTM	1				
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25 1100			To be	Sold_						1		
35. LIST OF ATTACH	Ments				a.							
36. I hereby certify	that the foreg	ding and	None attached i	nformation	is comp	olete and co	rrect as	determin	ed from	all available	records	n nroom
SIGNED A	G. 1.	AN S	ue	.0		01110±01			,A)R RECOHU 24-94

Title 18 U.S.C. Section 1001, makes 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 light and the United States any false, fictitious or fraudulent statements or representations as to any matter within its light and the United States any false, fictitious or fraudulent statements or representations as to any matter within its light and the United States any false, fictitious or fraudulent statements or representations as to any matter within its light and the United States any false, fictitious or fraudulent statements or representations as to any matter within its light and the United States and the United St

*(See Instructions and Spaces for Additional Data on Reverse Side)

AUG 2 0 1994

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.		7	TOP
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submitted in lieus of Form 3160)-5	
CH GURDE ED DEPARTM	UNITED STATES MENT OF THE INTERIOR J OF LAND MANAGEMENT	RECEIVED
	otices and Reports on V	Wells 94 FEB 25 PH 2:18
1. Type of Well GAS		5. 0 Dease Number No. SF-078885 6. If Indian, All. or Tribe Name 7. Unit Agreement Name
2. Name of Operator MERIDIAN OIL		Canyon Largo Unit 8. Well Name & Number
3. Address & Phone No. of Operation PO Box 4289, Farmington, N		Canyon Largo U 388
4. Location of Well, Footage, 2040'FSL, 1625'FWL Sec.3, T		10. Field and Pool Blanco MV Ext 11. County and State Rio Arriba Co, NM
12. CHECK APPROPRIATE BOX TO I Type of Submission _x_ Notice of Intent Subsequent Report Final Abandonment	Type of Abandonment Recompletion Plugging Back Casing Repair	
13. Describe Proposed or Comp	pleted Operations	
	ewall cores 5359-5719'. TOOH.	- 6.5#, J-55 8rd EUE tbg landed @ 5229'. I eleased rig.
	MAR O 8 1994	
	OIL COM. DIV. DIST. 3	
14. I hereby certify that the	e foregoing is true and	d correct.
Signed My Dradhuld	Title Regulatory	Affairs Date 2/25/94
(This space for Federal or Sta APPROVED BY	ate Office use) Title	ACCEPTED FOR RECORD Date
CONDITION OF APPROVAL, if any		MAR 07 1994
		FARMINGTON DISTRICT OFFICE
		FARMINGTON DISTRICT

submitted in lieu of Form 3160-5	_	
ON CONSERVE ON DIVISION UNITED STATES DEPARTMENT OF THE INTERIOR	/	
BUREAU OF LAND MANAGEMENT		
RECEIV		
Sundry Notices and Reports of	Wells	
93 SEP 15 PX	3:015.	Lease Number
	-	SF-078885
1. Type of Well GAS OF STANDART	ON NM 6.	If Indian, All. or
GAS	0.11	Tribe Name
% % OCT № 1993	7.	Unit Agreement Name
2. Name of Operator		_
MERIDIAN OIL OIL CON. DIV.		Canyon Largo Unit
967. 3	8.	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9	700 9	Canyon Largo U #388 API Well No.
10 Box 4205, Parmington, NA 67455 (305) 320-5	700 5.	30-039-25277
4. Location of Well, Footage, Sec., T, R, M	10.	Field and Pool
2040'FSL, 1625'FWL Sec.3, T-25-N, R-6-W, NMPM	11	Blanco MV Ext
	11.	County and State Rio Arriba Co, NM
		110 1111111 00, 1111
12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NO	•	PORT, OTHER DATA
	f Action	and of Diana
Notice of Intent Abandonment Recompletion	Cn	ange of Plans w Construction
x Subsequent Report Plugging Back	No	w Construction n-Routine Fracturing ter Shut off
Casing Repair	Wa	ter Shut off
Final Abandonment Altering Cash	ng Co	nversion to Injecti or
x Other -		
13. Describe Proposed or Completed Operations	······································	
Confidential		
00 14 03 mp 5404/ Mp 5100/ mm Pop 7" 23		
09-14-93 TD 5404' MD, 5100' TVD. Ran 7", 23; tool @ 3050'. Cmt first stage w/310	f csg lan Dev Clae	ged & 5335". Stage
calcium chloride, 6% gel, 0.5% FLA,		
cu.ft.), tail w/100 sx Class "G" nea	at w/1% c	alcium chloride (115
cu.ft.). Cement second stage w/550		
calcium chloride, 6% gel, 0.25 pps c cu.ft.), tail w/100 sx Class "G" ne		
cu.ft.). Circ trace of cmt to surface		
·		
14. I hereby certify that the foregoing is true	and corre	ct.
Signed June Madhuel Title Regulator	ry Affair	s Date 9/15/93
	4CCELTED	FOR RECORD
APPROVED BYTitle CONDITION OF APPROVAL, if any:		_ Date
CONDITION OF AFFROVAL, IL ally.	SED (L 6 1993
	FEDILINATAL	I DISTRICT OFFICE
		MM-

submitted in lieu of Form 3160-5	
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	
Sundry Notices and Reports on Wel	ls
	5. Lease Number
1. Type of Well GAS	SF-078885 6. If Indian, All. or Tribe Name
	7. Unit Agreement Name
2. Name of Operator MERIDIAN OIL 3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	Canyon Largo Unit 8. Well Name & Number Canyon Largo U #388 9. API Well No.
4. Location of Well, Footage, Sec., T, R, M 2040'FSL, 1625'FWL Sec.3, T-25-N, R-6-W, NMPM	30-039-25277 10. Field and Pool Blanco MV Ext 11. County and State Rio Arriba Co, NM
x Subsequent Report Plugging Back Casing Repair	Change of Plans Change of Plans New Construction Non-Routine Fracturing Water Shut off Conversion to Injection SEPI 01993
ONFIDENTIAL 08-27-93 TD 231'. Spud @ 5:15 pm 08-27-93. Drl 9 5/8", 36.0#, K-55 ST&C csg set @ 226'. w/3% calcium chloride (236 cu.ft.), circ	OIL CON, DIV. \DIST. G surface hole. Ran 5 jts Cmt w/200 sxoClass "G"
14. I hereby certify that the foregoing is true and o	CEIVED BLM 2 PM 3: 43
Signed Signed Stadhull Title Regulatory Af	
(This space for Federal or State Office use) APPROVED BY	OLITED FUN RECORL Date

FARMINGTON DISTRICT OFFICE sy Shn

755 · 1993

submitted in lieu of Form 3160-5 OHLOOMSERGE ON DIVISION DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	
194 00-27 6月 6 52 Sundry Notices and Reports on Wel	ls
1. Type of Well GAS	5. Lease Number SF-078885 6. If Indian, All. or Tribe Name 7. Unit Agreement Name
2. Name of Operator MERIDIAN OIL	Canyon Largo Unit 8. Well Name & Number
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700 4. Location of Well, Footage, Sec., T, R, M	30-039-25277 10. Field and Pool
2040'FSL, 1625'FWL Sec.3, T-25-N, R-6-W, NMPM	Blanco MV Ext 11. County and State Rio Arriba Co, NM
12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE Type of Submission	
13. Describe Proposed or Completed Operations Confidential	
It is intended to sidewall core this well between 5359-6100'. FE32 91844 OIL COMMON	RECEIVED BLM 94 FEB 23 AM II: 28 070 FARMINGTON, NM
14. I hereby certify that the foregoing is true and considered Signed Signed Stadhell Title Regulatory Africa	
(This space for Federal or State Office use) APPROVED BY Title	APPBBOVED
CONDITION OF APPROVAL, if any:	FEB 2 5 1994

State of New Mexico Form C-104 l)istrict I PC Box 1980, Hobbs, NM 88241-1980 Revised February 21, 1994 Diariet II Instructions on back OIL CONSERVATION DIVISION PO Drawer DD, Artesia, NM 88211-0719 Submit to Appropriate District Office PO Box 2088 Santa Fe, NM 87504-2088 5 Copies District III RECL 1000 Rio Brazos Rd., Aziec, NM 87410 AMENDED REPORT District IV PO Box 2008, Santa Fe, NM 87504-2088 REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT ¹ OGRID Number Operator name and Address Meridian Oil Inc. Reason for Filing Code PO Box 4289 Farmington, NM 87499 New Well * Pool Code 4 API Number 72319 **30 - 0**39-25277 Blanco Mesaverde * Well Number Property Code 1 Property Name 388 Canyon Largo Unit 886 Location East/West line North/South Line | Feet from the County Ul or lot po. Section Township Renge Lot.ldn Feet from the Rio Arriba 16251 West 20401 South 25N 11 Bottom Hole Location Feet from the Ul. or lot no. Section East/West line County Township North/South line Feet from the 683 25N 2462 South East " C-129 Expiration Date 13 Producing Method Code 14 Gas Connection Date " C-129 Permit Number C-129 Effective Date 13 Lae Cude Oil and Gas Transporters " Transporter Name " POD 11 POD ULSTR Location and Description and Address 014546 Meridian Oil Inc. PO Box 4289, Farmington, NM El Paso Natural Gas Company 888029 MEDELACH SEP 2 8 1994 Produced Water COM. Ell 8 13070 POD ULSTR Lucation and Description DIST 3 Well Completion Data 11 Spud Date 1º Perforations 36 Ready Date מד יי PRTD 5190-5196 5404-MD 5100-TVD 8-27-93 2-25-94 " Hole Size " Casing & Tubing Size ³² Depth Set " Sacks Cement 226 236 cu.ft. 12 1/4 9 5/8 7 1753 cu.ft. 7 7/8 5335 5229 2 7/8 VI. Well Test Data 1)ate New Oil " Gas Delivery Date " Test Date " Test Length " Tbg. Pressure " Cag. Pressure 2-25-94 SI 492 " Choke Size " Oil u Waler 4 Gas " AOF " Test Method F **TSTM** 1 hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my OIL CONSERVATION DIVISION 9/27/94 Approved by: Machueld Printed name: Bradfield Tile: Regulatory Representative Approval Date: 1)ste: 8-24-94 Phone: 505-326-9700 If this is a change of operator fill in the OGRID number and name of the previous operator Previous Operator Signature Printed Name Title Date

DEPARTMENT OF THE INTERIOR CONSERVE ON DIVISION BUREAU OF LAND MANAGEMENT

om 11 N6 APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 20-029-5. Lease Number Type of Work SF-078885 DRILL 6. If Indian, All, or Tribe Type of Well 1b. JUN1 8 1993 GAS 2. 7. Unit Agreement Name Operator UIL CON. DW MERIDIAN OIL Canyon Largo Unit DIST. 3 8. Farm or Lease Name 3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 Canvon Largo Unit 9. Well Number 388 (505) 326-9700 10. Field, Pool, Wildcat 4. Location of Well Blanco Mesa Verde 2040'FSL, 1625'FWL at surface 2640'FSL, 790'FEL at Total Depth 11. Sec,, Twn, Rge, Mer. Latitude 36° 25' 36", Longitude 107° 27' 29" Sec 3, T-25-N, R-6-W NMPM 14. Distance in Miles from Nearest Town 12. County 13. State Rio Arriba NM 18 miles to Counselors Post, NM 15. Distance from Proposed Location to Nearest Property or Lease Line 1625' This action is subject to technical and 16. Acres in Lease 17. Acres Assigned to Well procedural review pursuant to 43 OFR 3165.3 642.36 2 403 . 320 and appeal pursuant to 43 CFH 3155.4. 18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 450' DRILLING OPERATIONS AUTHORIZED ARE 20. Rotary or Cable Tools 19. Proposed Depth 5166' TVD 7927' MDSUBJECT TO COMPLIANCE WITH ATTACHED Rotary "GENERAL REQUIREMENTS". 21. Elevations (DF, FT, GR, Etc.) 22. Approx. Date Work will Start 6741'GR 2nd quarter 1993 23. **Proposed Casing and Cementing Program** See Operations Plan attached 24. Authorized by: Regional Drilling Engineer PERMIT NO. APPROVAL DATE APPROVED BY TITLE DATE APPROVED Archaeological Report to be submitted Threatened and Endangered Species Report to be submitted NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

R-7911 (E

DISTRICT MANAGER

2 Offi Fee Law -) come

DISTRICT! ?.O. Box 1980, Hobbs, NM 88240

Store of New Mexico Energy, Minerale and Natural Resources Department

RECEIVEDForm C-162 BLM

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe. New Mexico 87504-2088

93 JUN 10 PM 3: 17

.070 FARMINGTON, NM

DISTRICTE II -- P.O. Drawer DD. Artens, NM 88210 DISTRICT WELL LOCATION AND ACREAGE DEDICATION PLAT 1000 Rio Brane B4. Ares. NM 87410 All Distances must be from the outer boundance of the section 388 Meridian Oil Inc. Canyon Largo Unit Una Leger Rese County Rio Arriba 25 North 6 West MIM Acres France Language of Well: 2040 South 1625 West feet from t feet from the Cornel Invited Elev. e Formuse 6741' Blanco 642.36 Acres Mesa Verde 1. Oxions the acrosse deducated to the expect well by contrast per ip thereof (both as to writing manual and royalty). d to the well, have the insurer of all govern-been constituted by communi If move you type of constitution unitization et descriptions which have estably been equalidated. (Use prount ade of No allowable will be ass gaed to the well until all interests have being conscilences (by communication, immunica, forces-popular, or otherwise) or tests a rest-executed unit, eliminating such interest, has been approved by the Division. 5300.46 **OPERATOR CERTIFICATION** I havely carefy that the one Stalhuld 3 4 2 Peggy Bradfield Regulatory Rep. Meridian Oil Inc. JUN1 8 1993 5-27-9> OIL CON. DIV DIST, 3 I SURVEYOR CERTIFICATION I I hereby certify that the well location sh 1625 3-26-93 TH bedier. 2040

OPERATIONS PLAN

Well Name: Canyon Largo Unit #388

Location: 2040'FSL, 1625'FWL, Section 3, T-25-N, R-6-W

Rio Arriba County, New Mexico

Latitude 36° 25' 36", Longitude 107° 27' 29"

Formation: Blanco Mesa Verde

Elevation: 6741'GL

Formation Tops:	Top	Bottom	Contents
Surface	San Jose	2158'	
Ojo Alamo	2158'	2390'	aquifer
Kirtland	2390'	2615'	_
Fruitland	2615'	28551	gas
Pictured Cliffs	2855'	2900'	
Lewis	2900'	3712 '	gas
Chacra	3712'	4515'	
Cliff House	4515'	4530'	aquifer
Menefee	4530'	5073'	_
Point Lookout	5073 '		gas
Total Depth	5166' TVD	7927' MD	_

Logging Program: Mud log from 4500' to Total Depth MWD-GR from KOP to Total Depth

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-8.9	40-50	no control
200- 7927' MD	Non-dispersed	8.4-9.0	30-60	no control

Drilling:

Surface/Intermediate Hole:

Drill to surface casing point of 200' and set 9 5/8" casing. Mud drill from 200' to intermediate total depth. The well will be drilled vertically to a kick off point depth of 4707'. At this point the well will deviate at 15.0 degrees/100 feet to 84 degrees (80 degrees azimuth). At this point (5104' TVD, 5440' MD) 7", 23.0#, N-80/K-55 casing will be set (see wellbore schematic).

TVD	<u>MD</u>	Vertical <u>Section</u>	Hole <u>Size</u>	Notes
200'	200'	0'	12 1/4"	9 5/8" casing set
4707'	4707'	0'	8 3/4"	Kick off point
5104'	5440'	513'	8 3/4"	7" casing set

Production Hole:

Drill out cement/shoe of 7" casing, unload hole with air/mist. Drill (with air/mist) holding 84 degrees to a total depth of 5166' TVD (7927' MD). Run 4 1/2" perforated and plugged liner from 4800' MD to 7927' MD.

		Vertical	Hole	
TVD	MD	Section	Size	Notes
5104'	<u>5</u> 440'	366'	8 3/4"	Begin air drilling
5166'	7927'	3000'	6 1/4"	Run 4 1/2" liner

Materials:

Casing Program:

Hole Size (inches)	Measured Depth (ft)	TVD (ft)	Casing Size (in)	Weight (lbs/ft)	Grade
12 1/4"	200'	200'	9 5/8"	32.3	H-40
8 3/4"	4707'	4707'	7"	23.0	K-55
8 3/4"	5440'	5104'	7"	23.0	N-80
6 1/4"	(4800-7927')	5166'	4 1/2"	10.5	K-55

Casing Equipment:

9 5/8" surface casing - sawtooth guide shoe.

7" intermediate casing - cement nose guide shoe on bottom, float collar one joint off bottom, cementing stage tool set at 3000'. Centralizers spaced as follows: (15) spaced every fourth joint from bottom, (1) at joint below stage tool, (19) spaced every fourth joint above stage tool to surface. Two turbolizing type centralizers, one below and one into the Ojo Alamo at 2158'.

4 1/2" production liner - 7" x 4 1/2" liner hanger, guide shoe.

Tubing:

7900' of 2 3/8", 4.7#, J-55 8rd EUE tubing with seating nipple one joint off bottom and an expendable check valve on bottom.

Wellhead Equipment:

9 5/8" x 7" x 2 3/8" - 11" (2000 psi) wellhead assembly.

Cementing

- 9 5/8" surface casing use 106 sx of Class "B" cement with 1/4#/sx flocele and 3% calcium chloride (125 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hrs. Test casing to 700 psi.
- 7" intermediate casing First stage lead with 350 sx 65/35 Class "B" poz with 6% gel and 2% calcium chloride. Tail with 100 sx of Class "B" with 2% calcium chloride (738 cu.ft. of slurry, 100% excess to cover stage tool at 3000'.

- 7" intermediate casing (cont'd.) Second stage lead with 780 sx 65/35 Class "B" poz with 6% gel and
 2% calcium chloride. Tail with 100 sx of Class "B' with 2% calcium
 chloride (1498 cu.ft. of slurry, 100% excess to circulate to
 surface). WOC 12 hrs. Test casing to 1500 psi.
- 4 1/2" production liner liner set at 4800'. Pre-perforated and plugged from 5440' MD to 7927' MD.

BOP and Tests

- Surface to intermediate TD 11", 2000 psi double gate BOP stack (Reference Figure #1). Prior to drilling out surface casing, test rams and casing to 700 psi for 30 minutes.
- Intermediate TD to Total Depth 10" nominal, 2000 psi (minimum) double
 gate BOP stack (Reference Figure #1). Prior to drilling out
 intermediate casing, test rams and casing to 1500 psi (minimum) for
 30 minutes.
- Surface to Total Depth choke manifold (Reference Figure #2).
- Pipe rams will be actuated at least once each day and blind rams will be actuated once each trip to test proper functioning. A kelly cock valve and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

Additional Information

- This gas is dedicated.
- Section 3 is dedicated to this well.
- New casing will be utilized.
- Pipe movement (reciprocation) will be done if hole conditions permit.
- No abnormal pressure zones are expected.