A . J. A DY

orm 3160-4	Hac	Jup	Dh		SU'	BMIT IN DI	JPLICATE*	Form approyed. Budget Bereau	No. 1004-	0137	
November 1983) (formerly 9-330)		UNI	TED STAT	ES			(See other In-	Expires August 5. LEASE DESIGNA		D SERIAL NO	
	DEPA	ARTMEN	T OF THE	INTERIOR			reverse side)	SF-07821	3		_
				NAGEMENT				6 IF INDIAN, ALLC	TTEE OR	TRIBE NAME	-
WELL COM	IPLETIC	ON OR	RECOMP	LÉTION RE	<u>POR</u>	T ANI	D LOG*	7. UNIT AGREEME	NT NAME		-
la. TYPE OF WELL.		WELL	GAS WELL	DRY	Other			7. 0			
b TYPE OF COMPLET	TION: WORK	DEEP-	rLUG [DIFF X	Other	Reco	mpletion	8. FARM OR LEASI	NAME		-
NEW WELL 2 NAME OF OPERATO	OVER L	EN	LJ BACK L	RESVR LAS	Other			Federal A	<u> </u>		_
Linivores	J Pasour	ces Corpo	ation		A			9. WELL NO 2E			
3 ADDRESS OF OPER	RATOR				Jul	S(C)	Sing	LO FIELD AND PO	DL, OR W	ILDCAT	Jef. Con
1331 17	th Street,	Suite 800	Denver, CC	80202 (303)6 with any State requirem	4 0	1000	21 1/13 A	Tilcher-	Cut z	7	121.60 g
4 LOCATION OF WE	LL (Report le	1730' FW	NFNW	with they there vegas	-	AU6	0 6 1999	<i>? </i>	OR BLOC	K AND SURVEY	
At surface	090 FINE	1750 1 44	L, (1 L)	(חחום	0-	1399	OR AREA			
At top prod interval re	eported below				عالا	$\mathcal{G}(0)$	Mo DAM	Sec 26-1	30N-F	R13W	_
At total depth	same		Г	4. PERMIT NO.		DIST	GEEST COLUMN	12. COUNTY OR PARISH		13. STATE	_
				30-045-23865		10/3	1/1979	San Juan	1	NM V. CASINGHEAD	_
15. DATE SPUDDED	16. DATE T	REACHED	17. DATE COMPL		18.		NS (DF, RKB, RT, GR,	ETC.)*	i	765 ¹	
6/10/1999	6/16/		6/16/19	99		5765'		ROTARY TOOL		CABLE TOOLS	_
20 TOTAL DEPTH, M		21. PLUG BACK	T.D., MD & TVD	22. IF MULTIPLE HOW MANY	COMPL.	·	23. INTERVALS DRILLED BY	6486'		0'	
6550'		648	6'	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	•	1		0400		S DIRECTIONAL	_
24 PRODUCING INT	ERVAL(S), OF			M, NAME (MD & TVD)					SU	RVEY MADE	
1750' -	1770'	Fruitlar	nd Coal						<u> </u>	No	
26 TYPE ELECTRIC	AND OTHER I	LOGS RUN						27.	WAS WE	No No	
										140	

none			CASING RECORI	(Report all strip	ngs set in	well)		
8				HOLE SIZE	<u></u>	CEMENT	ING RECORD	AMOUNT PULLED
CASING SIZE	WEIGHT, L		H SET (MD)		255		" + 2% CaCl	
3 5/8"	24		390'	12-1/4"	255	SX Class D	1 270 Odo.	<u> </u>
			6550'	7-7/8"	200	sx Class "B	" + 8% gel + 160 :	sx
1/2"	10.5		0330		50/5	0 Poz;2nd	stage 350 sx	
					65/3	5 + 320 sx	50/50	
					3		TUBING RECORD	
9.		LINER RECOR		SCREEN (N	(D)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (IV	-	2-3/8"	1756'	1850'
						SHOT ERAC	TURE, CEMENT SQU	EEZE, ETC.

ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC 31 PERFORATION RECORD (Interval, size and number) AMOUNT AND KIND OF MATERIAL USED DEPTH INTERVAL (MD) 67,240# 16/30 sd w/ 30# gel wtr, 70Q foam 1750'-1770' 0.41" 4 jspf 1750' - 1770' PRODUCTION

•							-T: :		,,
			PRODUC	TION					-
13 *							TUS E Producin		$ \mathcal{C} $
DATE FIRST PRODUCTION	PRODUCTION M	ETHOD (Flowi	ng, gas lift, pumping - siz	te and type of pamps		shut-in)		\sim	- [1]
DATETIKSTIKOBOOTIS	1					l P	roducing		p
6/16/1999	Flowing				GAS - MCF	WATER - BBL.	₹ØAS-OI	L-RATIO -	× ~
	HOURS TESTED	CHOKE SIZE	PROD'N FOR	OIL - BBL	GAS - MCI	1	∓ 3:		
DATE OF TEST	HOURS TESTED		TEST PERIOD] [C:	_ •	, i
11-100	24		<i>──</i>			<u> </u>	IL GRAVITY - A	PI ROBB I	
6125 99		CH CHI ATED	OIL - BBL	GAS - MCF	WATER - BBL.	19	IIE GRANTITI - A	- (00/11/17)	
FLOW TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE		1	100	i	2	* ~	
		24-HOCK KATE	_	125	100			_ထ	
10	40		<u></u>			TEST WITNESS	ED BY		
34 DISPOSITION OF GAS	(Sold, used for fuel.	vented, etc.)				7 5 1	laican		
34 DISTOSTITION OF SIN						D.E. N	FOR	SCOF	בתנ
sold						ACCEPTE	י חטיו ט-	ALCOU!	10

35 LIST OF ATTACHMENTS

35 LIST OF ATTACHMENTS	
well bore diagram 36 I hereby certify that the foregoing and attached information is	s complete and correct as determined from all available records
36. I hereby certify that the folegoing art that hereby certification is a folegoing are the folegoing art that hereby certification is a folegoing art that hereby certificat	Fusinger

DATE

Huy Ohlunk TITLE Operations Engineer

FEDERAL A #2E

NENW Sec. 26-T30N-R13W San Juan County, New Mexico Drilled by Ladd Petroleum Corp

Spud date: 1/24/80

Schematic - not drawn to scale

Workover to perf & frac Fruitland 6/99

8-5/8" SURFACE CASING:

Length:

GL 5765'

9 jts 8-5/8", 24#, K-55, ST&C

375'

Casing landed @ 390' KB

Cemented w/ 255 sx Class "B" + 2% CaCl. Circulated 3 bbls.

Cmt to surface. PD @ 1:30 PM 1/24/80.

DV TOOL:

Located @ 4536'

4-1/2" PRODUCTION CASING:

151 jts 4-1/2", 10.5#, K-55 ST&C

6574.8'

Casing landed @ 6550' KB

Cemented w/ 200 sx Class "B" + 8% gel + 1/4#/sk celloflake. Tailed w/ 160 sx 50/50 Poz + 2% gel + celloflake + 6% D60.

Recip. Pipe while cementing. PD @ 6:45 AM 2/2/80.

2nd stage: Cement w/ 350 sx 65/35 + celloflake. Tailed w/ 320 sx 50/50 Poz + 2% gel + 1/4#/sk celloflake + 6% D60.

TUBING REPORT:

TUBING REPORT:	0.40
Notched collar	0.40
1 jt 2-3/8", 4.7#, J-55, EUE tbg	32.95
•	1.08
seating nipple	1,709.40
54 jts 2-3/8", 4.7#, J-55, EUE tbg	- '
KB correction	<u>12.00</u>
	1,755.83

Dakota perfs: 6433'-49' w/ 1 JSPF 23 holes total PBTD @ 6486' TD @ 6550'

Revised: 7/7/99 KB 5777' 12' KB 8-5/8" @ 390' KB

DV Tool @ 4536' KB

TOC @ +/- 1400' Fruitland Coal perfs: 莊 1750' - 1770' (4 jspf) 4-1/2" RBP @ 1850'



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

RECEIVED

OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

99 JUL 12 PM 2: 48

June 7, 1999

070 FARMINGTON, NM

Questar Exploration and Production Company 1331 Seventeenth Street - Suite 800 Denver, Colorado 80202 Attention: Garth W. Berkeland Telefax No. (303) 294-9632

Administrative Order NSL-4302

Dear Mr. Berkeland:

Reference is made to the following: (i) your application dated May 13, 1999; and (ii) the records of the New Mexico Oil Conservation Division ("Division") in Santa Fe: all concerning Questar Exploration and Production Company's ("Questar") request for an off-pattern non-standard Basin-Fruitland coal gas well location for the existing Federal "A" Well No. 2-E (API No. 30-045-23865), located 890 feet from the North line and 1730 feet from the West line (Unit C) of Section 26, Township 30 North, Range 13 West, NMPM, Basin-Fruitland Coal (Gas) Pool, San Juan County, New Mexico.

According to the Division's records, the Federal "A" Well No. 2-E was initially drilled in 1980 by Ladd Petroleum Corporation and completed at a standard infill gas well location in the Basin-Dakota Pool within a standard 320-acre gas spacing and proration unit comprising the W/2 of Section 26.

It is our understanding that Questar intends to temporarily abandon the Dakota interval in this well at this time and to recomplete up-hole into the Basin-Fruitland Coal (Gas) Pool. Pursuant to the "Special Rules and Regulations for the Basin-Fruitland Coal (Gas) Pool," as promulgated by Division Order No. R-8768, as amended, the location of this well is considered to be unorthodox. Further, the W/2 of Section 26 is also to be dedicated to this well in order to form a standard 320-acre by down gas spacing and proration unit for the Basin-Fruitland Coal (Gas) Pool.

By the authority granted me under the provisions of Rule 8 of these special pool rules the above-described unorthodox coal gas well location for the Federal "A" Well No. 2-E is hereby approved.

Sincerely

Lori Wrotenbery

Director

LW/MES/kv

cc: New Mexico Oil Conservation Division - Aztec

U. S. Bureau of Land Management - Farmington

District I 1625 N. French Dr., Hobbs, NM 88240 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Submit I copy of the final affected wells

Form C-104A

March 19, 2001

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

list along with 1 copy of this form per number of wells on that list to appropriate District Office

Change of Operator

Address: 1331 Seventeenth Street Address: Suite 200	Effective Date: February 1, 2002 New Ogrid: 193195 New Name: Markwest Resources, Inc. Address: 155 Inverness Drive West Address: Suite 200 City, State, Zip: Denver, CO 80112-5000 See the Oil Conservation Division have been complied with and that the information on this
Name: Questar E&P Company Address: 1331 Seventeenth Street Address: Suite 800 City, State, Zip: Denver, CO 80202 City, State, Zip: Denver, Co 80202 City, State and complete to the best of my knowledge and belief. New Operator Signature: New Name: Markwest Resources, 155 Inverness Drive Address: Suite 200 City, State, Zip: Denver, CO 80112-500 City, State, Zip: Denver, CO 80112-500 New Name: Markwest Resources, 155 Inverness Drive Suite 200 City, State, Zip: Denver, CO 80112-500 New Name: Markwest Resources, 155 Inverness Drive Suite 200 City, State, Zip: Denver, CO 80112-500 New Operator Signature:	New Name: Seventeenth Street 800 er, CO 80202 New Name: Markwest Resources, Inc. 155 Inverness Drive West Suite 200 Denver, CO 80112-5000 City, State, Zip: Denver, CO 80112-5000
Address: Suite 800 City, State, Zip: Denver, CO 80202 City, State, Zip: Denver, CO 80112-500 Thereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the attached list of wells is true and complete to the best of my knowledge and belief. New Operator Signature:	Address: Suite 200 er, C0 80202 City, State, Zip: Denver, C0 80112-5000 established Oil Conservation Division have been complied with and that the information on this
City, State, Zip: Denver, CO 80202 City, State, Zip: Denver, CO 80112-500 Chereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the attached list of wells is true and complete to the best of my knowledge and belief. New Operator Signature:	City, State, Zip: Denver, CO 80112-5000
hereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the attached list of wells is true and complete to the best of my knowledge and belief. New Operator Signature:	sof the Oil Conservation Division have been complied with and that the information on this
New Operator Signature:	s of the Oil Conservation Division have been complied with and that the information on this wells is true and complete to the best of my knowledge and belief.
Title:	LAND MANAGER APR 2002
NMOCD Approval	NMOCD Approval
Previous operator complete below: NMOCD Approval	e below: NWOCD Approvat
Previous	
Operator: Questar E&P Company Signature:	tal Ear Joinpand
Previous Printed	
OGRID: 23846 Name: SUPERVISOR DISTRICT #3	Name: SUPERVISOR DISTRICT #3
Signature: District: APR 1 8 2002	Stale District:APR 1 8 2002
Printed Date:	Date:
Name: Bea Steele Date.	3 LEE LE