Grand Resources
Navajo A #5
C-25-32W-18W

5A

In Communication with Navajo well#3
PERMIT APPLICATION
PACKAGE

NOV 41991 OIL CON. DIV.) OIST. 3

UIC PROGRAM



			*EPA Authorization #	
		Permit	Application Checklist	
Attached	Not Attached			
1. <u>X</u>	-	NO	dget Bureau Form / 1004 - 0135 (Sundrey Lices) or /1004 - 0136 (Application to Drill) copies to EPA).	
2. <u>X</u>		100	using township-range-sections to show the ation of wells within 1/2 mile (2640 ft.) of proposed well.	
3. <u>X</u>		3. Tab (26	ulation of data on wells within 1/2 mile 40 ft) including:	
		dep	th	
		loca	tion	
		For also	wells that penetrate the injection interval, show:	
	-	date	drilled	
		гесо	rd of plugging and/or completion	
		Corr	ective action plan for inadequately completed ugged wells.	
4. <u>X</u>		I Injec	tion well schematic drawings of surface and rface details showing:	•
•		·- :(1)	total depth plug-back depth,	
		(11)	depth to top and bottom of injection interval.	=
		(111)	depth to top and bottom of casing and cemented interval, plus amount of cement,	
		(1v)	size of casing and tubing and depth of packer, and	-
		(v)	hole diameter.	
		(vi)	other perforated intervals.	
	X	(vii)	daily drilling records, if available	
* Applicable to w	ells authorized	by rule		

Well #

Permit #

Date Received :

Navajo #5A

	C -
Attached Not Att	<u>ached</u>
5. <u>X</u>	5. Operating data including:
	(i) maximum and average injection rate.
	(ii) maximum and average injection pressure.
	<pre>(iii) fracture pressure gradient of injection zone.</pre>
	(iv) whether operations is cyclic or continuous,
6. X	(v) source and analysis of injected fluids including TDS, chlorides, and additives.
7	6. Geologic data on the injection and confining zones, including faults, geological name, thickness, porosity, permeability, depth, current reservoir pressure or fluid level, water quality, and lithologic description.
7. No fresh water	 Depth to base of fresh water (10,000 mg/l)
8. <u>X</u>	8. Verification of public notice, consisting of a list showing names, addressess, and date that notice of permit application was given or sent to each:
	(f) surface land owner.
	(ff) tenant.
	(iii) operator of a producing lease within one- half mile of the well location, and
9	(fv) affected Tribal Government.
	 All available logging and testing data on the well (for existing wells only).
10. X	10. Proof of adequate financial responsibility.
11. X	 Certification form signed by well owner/operator or authorized representative (authorization must be in writing and copy attached).
12. $\underline{(Yes)}$ $\underline{(No)}X$	12. Has the applicant declared any part of his submission confidential? [147.2907]
13. <u>(Yes)</u> (No) X	13. Is the injection well currently authorized by rule? If yes, EPA Inventory No. is

	Attached	Not Attached		
14.	(res) X	(No)	14.	Was applicant required by EPA to apply for a permit?
15.	(Yes)X	(No)	15.	The permit applicant is the owner/operator (circle one or both)
16.	(Yes)	(No) X	16.	Has the applicant requested emergency authorization to inject.
17.	. <u>X</u>		17.	Plugging and Abandonment Plan, and estimated cost of plan.
-	Admi	nistrative Res Signature/Date	v i ewe	· · · · · · · · · · · · · · · · · · ·
		•		

Technical Reviewer Signature/Date

17. PLUGGING AND ABANDONMENT PLAN

When the well is plugged, a cast iron bridge plug will be set at 1035 feet. An acceptable cement slurry will be spotted above the CIBP, heavy drilling mud will be spotted above cement plug. 4½" casing will be shot off at free point and cement will be circulated from 100 feet to the surface. Location will be restored to as natural a state as possible. Estimated cost - \$5,000.00.

GRAND RESOURCES, INC.	1149IND7850 G. D' GRITTE, ALLOTTER CO TRICE RAME Navajo Tribal
(Do not not the form for proposals to drill or to drepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.) I. Ort.	Navajo Tribal
GRAND RESOURCES, INC.	
GRAND RESOURCES, INC.	Mesa Gallup
	Navajo.
2250 E. 73rd Street, Suite 400 Tulsa, OK 74136	5A
At surface 610 PNI _ 1000 PWI	Mesa Gallup 11. esc. T. e. M. of ME. AFD OUTST OF MALE AFD
14. PREMIT PO. [16. ELEVATIONS (Show whether or, et, on one.]	Sec. 25-32N-18W
5428' DF	San Juan NM
14. Check Appropriate Box To Indicate Nature of Notice, Report, or Other	
	IT ELIVET 0F:
PRACTURE TREAT PRACTURE TREAT BROOT OR ACTRICE REPAIR WELL CHARGE PLAT: 2 CHARGE PLAT: 2	TOTHOUMENTS THACKIAC CTRING STATUTE ASIT
1. Lay down production tubing and rods. 2. Run plastic line 2 3/8" tubing to 950' with Baker Mdl R packer. Set load anular space with treated packer fluid. Press test anulus for he	t packer @1550!.
 Acidize perfs 1037-45' with 500 gallons 15% MCA. Commence injec January 15, 1991. 	tion approximately
	N 4 9 W
I Letter orthy last the foregoing a tran and correct	
siched President	DATE 11-17-90
(This space for Federal or State office and)	•

more : The second	-11-	-12-	-4-
MANAGORANA -E1-	•	-13- IMPRITO 44	-18-
-11-	-21-	100 07 MANDO 012 TANDO 101 01 MANDO 101 04	-18-
PROPOSED INJECTION WELL CONVERSIONS	-28-	-25	CONTRACT OF THE PROPERTY OF TH
-84-	HESA CALLUP FIELD BOW JUN COUNTY, MEN MEXICO RLL HELLS IN INPUT DATA FILE CONTOUR INTERPRET & MA-FE CONTOUR INTERPRET & MA-FE DATE: 10-13-67 Jack Bohrankel & Associated Inc. Tules, Oxiohesa	-26-	HOMECE

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TABULATION OF WEL WITHIN & HILE OF PROPOSE INJECTION WELL WHICH PENETRATE THE INJECTION ZONE.

Well Na	6 •	Compan	y Name	Date Drilled Depth
Locatio	n•	F_L &	' 7_L;/4. Sec	Depth
	Casing	Landed	Cement 6 Additive Date	
Jornetic	ons Oper	to Wellbo	*********	
Well Nam	•	Company		Date Drilled Depth
			E .	• Status
Sire S	ize	Lended Depth	wills in	Top of If well is TA or Pa
-!-		1.	area ti.	
ell Name	·	Company		Date Drilled Depth
120 51	sing	Depth .	Cement & Additive Data	Top of If well is TA or Pt Cement Describe How:
or wation	* Open	to Wellbor	• 1	
11 Name		Company	N 4 m €	Date Drilled Depth_
ocation_	,	_r	r_L,/1, Sec.	Date Drilled Depth
Ca Ca	atud	Lended Depth	Cement & Additive Date	Top of If well is TA or Pt Cement Describe How,
_				
rmations	Open	o Wellbore	11	

EXPL/DRILL/CO	GRAND	GRAND	GRAND	GRAND	GRAND	GRAND	NAVA	GRAND	GRAND	GRAND	GRAND	EXPL/DRILL/CO	EXPL/DRILL/CO	GRAND	GRAND		RL BAYLESS N	GRAND NAV "A"	GRAND NAV "A"	ZOLLER & DANNENBERG	OPERATOR	
7	9	ч ы С	4	#3	# 2	## 1	NAVAJO TRIBAL C	#12	#11	æ æ	#7	440	7 #5	## - <u>A</u>	## 3	NAVAJO	NAV #6	A* #5	A* #4	BLUEHILL #1	HELL NAME	
4-7-69	3-12-69	3-23-68	10-3-61	3-17-62	3-10-62	2-26-62		2-18-62	1-24-62	2-10-62	1-13-62	12-30-61	11-29-61	10-3-61	8-10-61		7-2-64	12-4-61	11-8-61	7-26-65	DATE	
H990FS-990FW	N1720FW-650FS	L2310FS-330FW	J1650FS-1710FE	O330FS-2310FE	H1650FN-330FE	L660FN-2310FS		F2290FN-1780FW	B330FN-1650FE	A950FN-330FE	E2310FN-330FW	365FS-760FW	J2135FS-1935FE	J1650FS-1710FE	N660FS-1980FW		3300FS-3300FW	C610FN-1980FW	B600FN-1980FE	2319FW-1980FE	LOCATION	
14,32N-18W	14,32N-18W	14,32N-18W	14,32N-18W	14,32N-18W	23,32N-18W	24,32N-18W		24,32N-18W	23,32N-18W	23,32N-18W	24,32N-18W	13,32N-18W	23,32N-18W	14,32N-18W	24,32N-18W		25,32N-18W	25,32N-18W	25,32N-18W	25,32N-18W	SECTION	
1327	1310	1762	1365	1380	1478	1295		1573	1438	1445	1482	1472	1254	1365	1163		1093	1062	1120	1573	TOTAL	
ı	1252-69	1642-65	1315-23	1312-20	1407-17	1225-36		1521-28	1381-92	1383-94	1423-38	I	1	1315-23	1110-26		I	1037-45	1051-66	1	COMPLETION	
1	77	84	6	36	89	92		8	87	88	88	1	1	6	49		i	ъ	8	ı	I.P. (BOPD)	
3	*	3	3	3	=	7		3	2	I	3	1	1	3	z		:	3	GALLUP	1	FORMA-	
7"@30 c	45" @1310	43"e1749	43"e1357	4}" @1373	4ኝ" የ1476	4ኝ" @1288		4ኝ" የ1572	4ኝ" @1438	45" 01437	43"@1481	7"866	7"@30	45"01357	43" e1158		5½*e52	3¥"@1057	? 43"@1045	7"@30	CASING SIZE & DEPTH	
circ.	35	35	35	08	80	80		40	40	40	40	circ.	circ.	35	45		circ.	100	100	circ.	H SXS	
P&,	שׁ	ч	Ъ	של	ਖ਼	н		ы	_	_	u	מַ	ሳ				P.			י. טיַ	10	

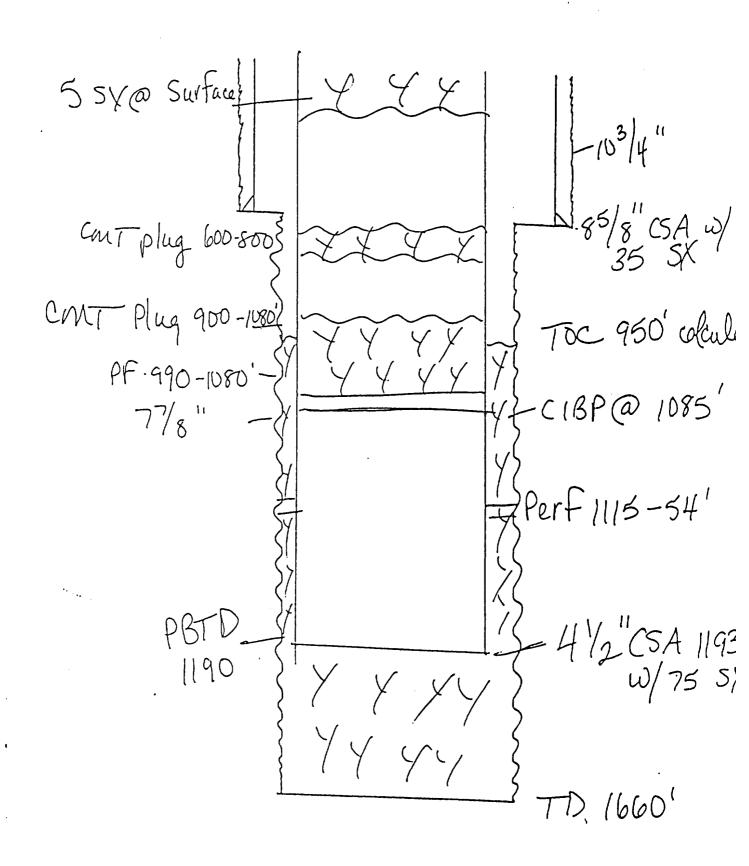
HARLAN DRLG NAV			ING TI.		AAA FSHING TL NA	AAA FSHING TL N	ARI-MEX Ni		ADT-MEY N	ARI-MEX N		APT-MEY N	DUGAN HORS		AZTEC OIL & GAS N		OPERATOR
NAV #2		ber 41 /1 −4	#7			NAV #4	NAV #3A	T# > AWN	7 C ± 1	NAV #6	NAV B #Z	מינים מינים	HORSESHOE #2E 6-17-64	•	NAV #3		MELL NAME
5-4-64	10-4-6/		2-24-69	3-10-70	12-18-70	1-24-68	5-30-64	D-Z-64	n	5-16-68	0/-CT-0T	10 17 10	6-17-64	:	11-14-59		SPUD DATE
350FW-540FS	3300FW-440FS	22021: 11222 22021: 1222	7310EM-1480EE	1150 571 140051	165056-165055	3850FW-2510FS	4530FW-4335FS.	4595FW-3580FS		4950FW-3030FS	4950FW-2310FS		330FW-3210FS		4745FW-79AFC		LOCATION
10,32N-17W	10,32N-17W	TO, 32N-18W	15,32N-18W	TO, JON-18W	10 1 WCC 31	15 301-105	15,32N-18W	15,32N-18W		15 32N-18W	15,32N-18W		30.32N-17W	WOILMZC, CZ	26 220 100		SECTION
1183	1873	1295	1275	C871	1007		1312	1276	1000	1360	1718	+ - (1175	1000	1660		TOTAL
1	1664-78	ļ.	1197-1205	1	•	į	1250-60	1223-38	FOCT_707T	1000 100	1612-14	TTOTTO	1101-10				COMPLETION
t	6	1	6			,	19	32			10	7.0	,			(por b	I.P.
	3	3	3	3	=		3	3	;	l	3	GALLUP		GALLUP			FORMA-
7"@30 c.	43"e1764	7" @30 c	45"01272	7"@60	7 * 	7TCTA CE	AL# 61 31 3	44"@1276	45"e1345		44"01717	45"@1172		8.5/8960		SILE & DEPTH	
circ.	135	circ.	125	25	circ.	ú	י ר	50	35	+ + (7 7 6	<u>3</u> 5		ω 5		SXS	
P&A	שי	P&A	ש	P&A	P&A	מי	, ,	ש	טי	•1	đ	שי		P&A		SULVIS	•

ALL WELLS ARE 64" hole size except:

RL BAYLESS NAVAJO #6, 3300 FS - 3300 FW, Section 25-32N-18W and AXTEC OIL & GAS NAVAJO #3, 4745 FW - 790 FS, Section 25-32N-18W and these two wells have 7 7/8" hole size

THE TOP OF THE CEMENT IS NOT INDICATED BY EITHER TEMPERATURE SURVEY OR BOND LOG ON THE PRODUCING WELLS. ALL CEMENT TOPS MUST BE CALCULATED.

AZTEC O	IL & GAS CO.	NAVAJO	, 11-	14-59
OPERATOR		LEASE	SPUD	DATE
#3	790FS-535F	E 25	32N	18W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE



HARLAN	DRILLING CO.	NAVAJO	5-4-64
OPERATOR		LEASE	SPUD DATE
#2	350FW-540FS	10	32N 17W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP

50' to surface 6/4" hole -Drill hud

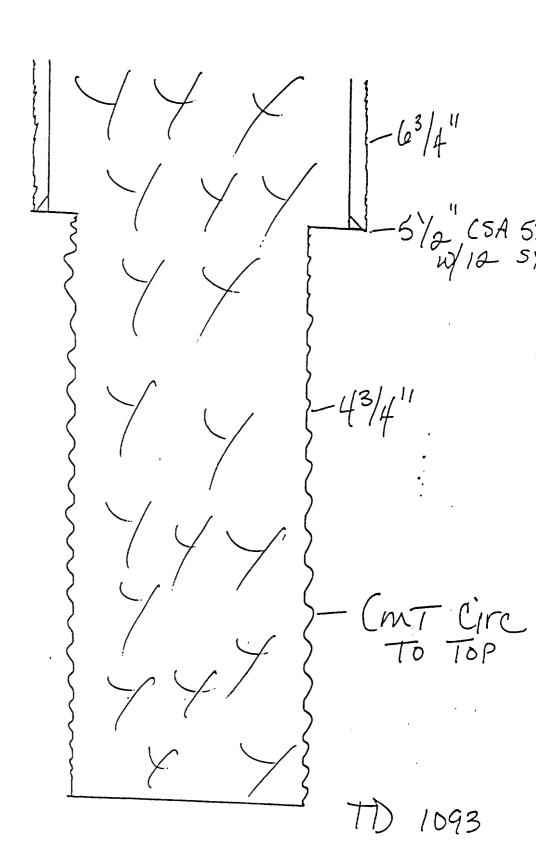
. AAA	FISHING TOOL	NAVAJO	12-	3-70
OPERATOR		LEASE	. SPUI	D DATE
B-1	1650FN-1650FE	15	32N	• 18W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE

5 s.x @ Surfac 7" (SA 60' W/o 5X Drill MUD Top CUT Plug 1

AAA FIS	HING TOOL	OLAVAIO	1-24-68
OPERATOR		LEASE	SPUD DATE
# 4	3850FW-2510FS	15	32N 18W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP RANGE

1.7" CSA 50 W/ 6 1/4 1 1200' Top Plug 226.F. 1300' Botton Plu

R, L, F	BAYLESS	OLAVAN	7-1-64
OPERATOR	•	LEASE	SPUD DATE
#6	1980FN-1980FE	25	32N 18W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP RANGE



EXPLORA	TION DRILLING CO.	NAVAJO	4-7	- 69 .	
OPERATOR		LEASE	SPUD	SPUD DATE	
#7	990FS-990Fw	14	32N	 18W	
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE	

· 5 SX Top Plug 7"CSA 30"W/ 6/4" MUD

EXPLORATION DRILLING CO.		OLAVAG	11-29-61
OPERATOR		LEASE	SPUD DATE
#5	2135FS-1935FE	23	32N 18W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP RANGE.

MUD OC 1123 Cal

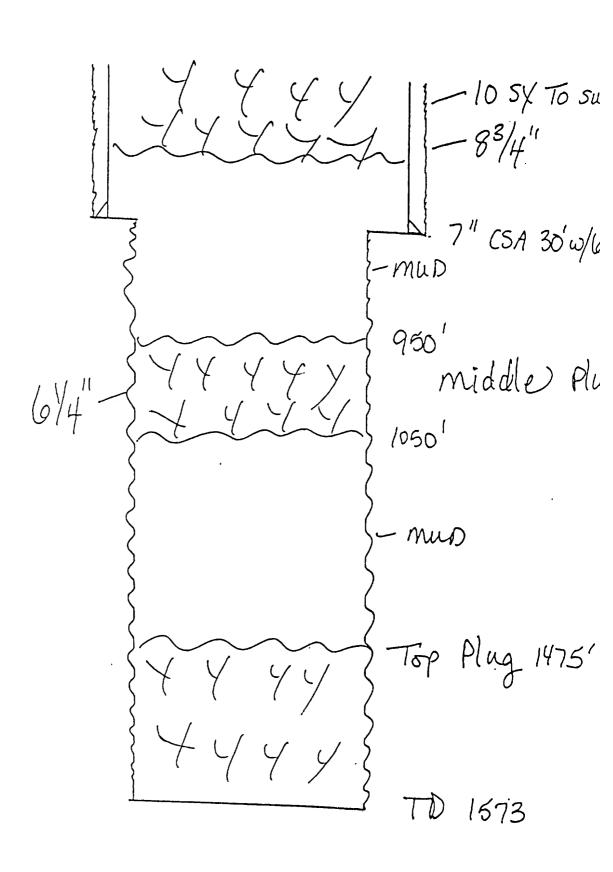
EXPLO	EXPLORATION DRILLING CO.		OLAV	12-30-61	
OPERATOR		LEASE		SPUD DATE	
# 6	365FS-760FW	13	32N	18W	
WELL NO.	FOOTAGE LOCATION	SECTION	TO	WNSHIP PANCE	

-654 To sui -83/4 hole -7" CSA 66 W/1 1472

AAA FISHING TOOL OPERATOR		OLAVAN	2-24-69		
		LEASE	SPUD DATE		
		• • • •	•	τ,	
#7	2310FW-4950FS	15	-32N	1.8W	
WELL NO.	FOOTAGE LOCATION	SECTION	MOINIGHT	PANCE	

ToHOL Dill mud TCMT 1150'

ZOLLER & DANNEBERG OPERATOR		BLUEHILL	7-26-65		
		LEASE	SPUD DATE		
#1	2319FN-1980FE	25	32N	18W	
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE	



WELL SCHEHATIC

Operator GRAND RESOURCES, INC.		,	lell Name: Navajo	• • •	5 A
Completion Date: 02/01/62					•
		-	610 Ft. FN L	\$ 1980 Ft.	. F_W_L
			1 Section 25	_Twp. 32N R	18W
Surface Elevation 5428 DF					
Formation(s) Top/Rottom			SURFACE CASI	NG DATA	
from PBTD to surface:			Hole Size:	8 3/4	In.
Gallup Sand · 1035 / 45			Casing Size:	7	In.
Gallup Silt : 950 / 1035	111		Weight:	23	1b/F
Mancos Shale 950 / surface	111		Length:	109	Ft.
			Cement Type:	Class re	
J]		Amount:	50	Sx.
			Casing Additives:	None	
		(109' Casing set at	109	Ft.
Tubing Size: 2 3/8 In.			Top of Cement:	Circ	Ft.
Weight: 4.6 lb./Ft.		11	Method of	~•	 ,
Length: 950 Ft.			Determination:	Circ	
Packer Type: Hal Mod R			000000000000000000000000000000000000000		
CaA			PRODUCTION CAS	ING DATA	
		1 1	Hole Size:	6 1/4	In.
Formation(s) perforated above packer:	- 1 1	11.	Casing Size:	4 ½	In.
None to		11	Weight:	9 ½	1b/ft
to		1 1	Length:	1057	Ft.
	-		· Cement Type:	Class reg	
Formation(s) perforated below packer:	11		:tnucmA	100	Sx.
Gallup Sand 1037 to 1045	11		Additives:	None	
to		1 1	Casing Set at:		Ft.
to		2 3/8 @950'	tbg. Top of Cement:	600	Ft.
Open hole below production casing			Method of	. .	
to		Packe @950'		Calc	_
Formation(s) present in open hole:		Q 330			
·		\boxtimes	P8TO: 105		_
None			TD: 106	2	
	ID:	L1111 0-			
	1062'	4½" Cs @1057	, word. Are depin	s are to be	from
- Perfs: 1	1037-1045		ground level. I used make notation	f KB depths	1:00
			give height of Ki	B above grou	nd n
			level.	,	

Permit	

Well Completion and Operation Data

	is/syclic)			
	ys operating/year	365		
Rate (B/D): Aver	· · · · · · · · · · · · · · · · · · ·		1mum 500	
	e (psi): Average 25		imum _ 1000	
Fluid: TDS	Sp. Gr.	Ana	lyses include	ec: (yesk
Source (formatio		ha injected?	(machan)	
What will those	added to the water to additives be?	be injected:	(Aexino)	
logic Data (all re	ferences to depths are	below land su	rface)	
	el: Top 1037 ; Botto	om 1045 : Eff	ective Thickn	ess 71
Formation na		Lithology	Sandstone	
Porosity (%)	16 Current Reserv	voir Pressure_	120# Date 1	1/15/90
	Current Fluid Lev	el in Hell 201	o ft. Da	ce_11/15,
	y (md) 125	ATT)		
Dritt Stem i	lest Included: (YES)	((On)		
Confining Zones	Thickness between inj	ection zone an	d USDW No	
Lithology	Shale			-,
Lithology Cumulative S	Shale	ckest shale zo		(interv
Lithology Cumulative s Faults: Are there	Shale 900 : thi any faults in the are	ckest shale zo	ne All	_(interv.
Lithology Cumulative s Faults: Are there	Shale	ckest shale zo	ne All	_(interval
Lithology Cumulative s Faults: Are there injection	Shale 900 : this any faults in the area interval? (Yes No	ckest shale zo a of the well	ne <u>All</u> which penetr	(interv
Lithology Cumulative s Faults: Are there injection	Shale hale 900 : thi any faults in the are interval? (Yes/No) ences to depths are be	ckest shale zo a of the well	ne <u>All</u> which penetr	_(interv
Lithology Cumulative s faults: Are there injection Data: (all refer	Shale hale 900 : thi any faults in the are interval? (Yes/No) ences to depths are be DF	ckest shale zo a of the well low land surfa	ne <u>All</u> which penetro	ate the
Lithology Cumulative s Faults: Are there injection Data: (all refer	Shale hale 900 : thi any faults in the are interval? (Yes/No) ences to depths are be DF 5428 (/GL) Tot	ckest shale zo a of the well low land surfa al (Depth/Plug	ne <u>All</u> which penetro	ate the
Lithology Cumulative s Faults: Are there injection Data: {all reference Surface Elevation Date Drilled or to	Shale hale 900 : this any faults in the are interval? (Yes/No) ences to depths are be DF : 5428 (/GL) Toto be drilled 02/01/6	ckest shale zo a of the well low land surfa al (Depth/Plug 2	ne <u>All</u> which penetro ce) ged Back Dep	th) 1062/1
Lithology Cumulative s Faults: Are there injection Data: {all reference Surface Elevation Date Drilled or to	Shale hale 900 : thi any faults in the are interval? (Yes/No) ences to depths are be DF 5428 (/GL) Tot	ckest shale zo a of the well low land surfa al (Depth/Plug 2	ne <u>All</u> which penetro ce) ged Back Dep	ate the
Lithology Cumulative s Faults: Are there injection Data: {all reference Surface Elevation Date Drilled or to	Shale thale 900 : this any faults in the are interval? (Yes/No) ences to depths are be DF: 5428 (/GL) Toto be drilled 02/01/6 le on (this well/offse None	ckest shale zo a of the well low land surfa al (Depth/Plug 2	ne <u>All</u> which penetro ce) ged Back Dep	th) 1062/1
Lithology Cumulative s faults: Are there injection Data: (all refer Surface Elevation Date Drilled or to Type logs availab	Shale hale 900 : this any faults in the are interval? (Yes/No) ences to depths are be DF: 5428 (JGL) Toto be drilled 02/01/6 le on (this well/offse None Size Depth S	ckest shale zo a of the well low land surfa al (Depth/Plug 2 t well): (By reacks of Hole	me All which penetro ce) ged Back Depo elerence/incl	th) 1062/1
Lithology Cumulative s faults: Are there injection Data: (all refer Surface Elevation Date Drilled or to Type logs availab Construction:	Shale hale 900 : this any faults in the are interval? (Yes/No) ences to depths are be DF: 5428 (/GL) Toto be drilled 02/01/6 le on (this well/offse None Size Repth S (in) Interval Co	ckest shale zo a of the well low land surfa al (Depth/Plug 2 t well): (By r	me All which penetro ce) ged Back Depo elerence/incl Cement Interval	th) 1062/1
Lithology Cumulative s faults: Are there injection Data: (all reference of the control of the control of the construction: Surface Csg.	Shale hale 900 : this any faults in the are interval? (Yes/No) ences to depths are be DF: 5428 (JGL) Toto be drilled 02/01/6 le on (this well/offse None Size Depth S	ckest shale zo a of the well low land surfa al (Depth/Plug 2 t well): (By reacks of Hole	me All which penetro ce) ged Back Depo elerence/incl	ate the
Lithology Cumulative s faults: Are there injection Data: (all reference of the construction: Surface Elevation Type logs availab Construction: Surface Csg. Intermediate Csg.	Shale thale 900 : this any faults in the are interval? (Yes/No) ences to depths are be DF: 5428 (/GL) Toto o be drilled 02/01/6 le on (this well/offse None Size Depth S (in) Interval Co 7" 109"	ckest shale zo a of the well low land surfa al (Depth/Plug t well): (By r acks of Hole ement Size 8 3/4	me All which penetro ce) ged Back Depteron elerence/incl Cement Interval Circ	th) 1062/1 luded How Detemi Circ
Lithology Cumulative s faults: Are there injection Data: (all reference of the construction of the constr	Shale Shale 900 : this any faults in the are interval? (Yes/No) ences to depths are be DF: 5428 (/GL) Toto o be drilled 02/01/6 le on (this well/offse None Size Depth S (in) Interval Co 7" 109"	ckest shale zo a of the well low land surfa al (Depth/Plug 2 t well): (By r	me All which penetro ce) ged Back Depo elerence/incl Cement Interval	th) 1062/1 luded How Detemi
Lithology Cumulative s faults: Are there injection Data: (all reference of the construction: Surface Elevation Type logs availab Construction: Surface Csg. Intermediate Csg.	Shale thale 900 : this any faults in the are interval? (Yes/No) ences to depths are be DF: 5428 (/GL) Toto o be drilled 02/01/6 le on (this well/offse None Size Depth Society (in) Interval Cooperation 7" 109" 4½" 1057"	ckest shale zo a of the well low land surfa al (Depth/Plug t well): (By r acks of Hole ement Size 8 3/4	me All which penetro ce) ged Back Depteron elerence/incl Cement Interval Circ 1057-600	th) 1062/1 luded How Detemi Circ Calc

CAMPBELL & BLACK, P.A.

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JEFFERSON PLACE SUITE 1 - 110 NORTH GUADALUPE POST OFFICE BOX 2208 SANTA FE. NEW MEXICO 87504-2208 TELEPHONE: (505) 988-4421 TELECOPIER: (505) 983-6043

May 12, 1989

Grand Resources, Inc. 2250 E. 73rd Street Tulsa, Oklahoma 74136

Attn: Jana Ray

Oil Conservation Division Cases 9636 and 9637: Applications for Statutory Unitization and Approval of a Waterflood Project, San Juan County, New Mexico

Dear Jana:

Enclosed are copies of the notice letters we discussed this date. If you require anything further, give me a call.

Very truly yours,

Secretary to WILLIAM F. CARR

Enclosures

CAMPBELL & BLACK, P.A.

JACK M, CAMPBELL
BRUCE D, BLACK
MICHAEL B, CAMPBELL
MILLIAM F, CARR
BRADFORD C, BERGE
WARK F, SHERIDAM
J, SCOTT HALL
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PATRICIA A, MATTHEWS

JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208

SANTA FE. NEW MEXICO 87504-2208
TELEP-ONE 15051 988-442TELECOPICA 15051 983-6043

March 8, 1989

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Dugan Production Corporation Post Office Box 5820 Farmington, New Mexico 87499

Attn: Tom Dugan

Re: Application of Grand Resources Inc. for Statutory Unitization, San Juan County, New Mexico

Gentlemen:

This letter is to advise you that Grand Resources Inc. has filed an application with the New Mexico Oil Conservation Division seeking an order statutcrily unitizing for the purpose of establishing a secondary recovery project, all mineral interests in the designated and undesignated Mesa-Gallup Pool underlying 4800.00 acres, more or less, of Federal Indian lands in Sections 10, 13, 14, 15, 23 and 24 and the N/2 of Section 25, Township 32 North, Range 18 West and Section 30, Township 32 North, Range 17 West. Said unit is to be designated the Mesa-Gallup Unit Area. Among the matters to be considered at the hearing will be the necessity of unit operations; the designation of a unit operator; the determination of the horizontal and vertical limits of the unit area; the determination of the fair, reasonable, and equitable allocation of production and costs of production, including capital investment, to each of the various tracts in the unit area; the determination of credits and charges to be made among the various owners in the unit area for their investment in wells and equipment; and such other matters as may be necessary and appropriate for carrying on efficient unit operations; including but not limited to, unit voting procedures, selection, removal or

Dugan Production Corporation March 8, 1989 Page Two

substitution of unit operator, and time of commencement and termination of unit operations. Applicant also requests that any such order issued in this case include a provision for carrying any nonconsenting working interest owner maintain the unit area upon such terms and conditions to be determined by the Division as just and reasonable.

This application has been set for hearing before an Examiner of the Oil Conservation Division on March 29, 1989. You do not need to be present at the hearing, but failure to appear at the hearing or otherwise become a party of record in this case will preclude you from challenging this matter at a later date.

Very truly yours,

WILLIAM F. CARR

ATTORNEY FOR GRAND RESOURCES, INC.

WFC:mlh

cc: Marvin Rabinowitz

P-106 676 409

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P-106 676 407

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PS Form 3800. June 1985

CAMPBELL & BLACK. P.A.

JACK M. CAMPBELL
BRUCE D. BLACK
MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN
J. SCOTT MALL
JOHN M. BEMIS
MARTE D. LIGHTSTONE
PATRICIA A. MATTHEWS

JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUFE
POST OFFICE BOX 2208

SANTA FE, NEW MEXICO 87504-2208
TELEPHONE 15051 988-4421
TELECOPICE 15051 983-6043

March 8, 1989

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Air-Mex Corporation First Western National Bank Building Post Office Box 249 Moab, Utah 84532

Attn: Skip Nightengale

Re: Application of Grand Resources Inc. for Statutory Unitization, San Juan County, New Mexico

Gentlemen:

This letter is to advise you that Grand Resources Inc. has filed an application with the New Mexico Oil Conservation Division seeking an order statutorily unitizing for the purpose of establishing a secondary recovery project, all mineral interests in the designated and undesignated Mesa-Gallup Pool underlying 4800.00 acres, more or less, of Federal Indian lands in Sections 10, 13, 14, 15, 23 and 24 and the N/2 of Section 25, Township 32 North, Range 18 West and Section 30, Township 32 North, Range 17 West. Said unit is to be designated the Mesa-Gallup Unit Area. Among the matters to be considered at the hearing will be the necessity of unit operations; the designation of a unit operator; the determination of the horizontal and vertical limits of the unit area; the determination of the fair, reasonable, and equitable allocation of production and costs of production, including capital investment, to each of the various tracts in the unit area; the determination of credits and charges to be made among the various owners in the unit area for their investment in wells and equipment; and such other matters as may be necessary and appropriate for carrying on efficient unit operations; including but not limited to, unit voting procedures, selection, removal or

Air-Mex Corporation March 8, 1989 Page Two

substitution of unit operator, and time of commencement and termination of unit operations. Applicant also requests that any such order issued in this case include a provision for carrying any nonconsenting working interest owner maintain the unit area upon such terms and conditions to be determined by the Division as just and reasonable.

This application has been set for hearing before an Examiner of the Oil Conservation Division on March 29, 1989. You do not need to be present at the hearing, but failure to appear at the hearing or otherwise become a party of record in this case will preclude you from challenging this matter at a later date.

Very truly youns,

WILLIAM F. CARR

ATTORNEY FOR GRAND RESOURCES, INC.

WFC:mlh

cc: Marvin Rabinowitz

P-106 676 408

RECEIPT FOR CERTIFIED MAIL

OF THE STATE OF THE STATE

See Reverser

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CAMPBELL & BLACK, P.A.

JACK M. CAMPBELL
BRUCE D. BLACK
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MARK F. SHERIDAN
J. SCOTT HALL
JOHN H. BEMIS
WILLIAM P. SLATTERY
MARTE D. LIGHTSTONE
PATRICIA A. MATTHEWS

JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208

SANTA FE, NEW MEXICO 87504-2208

TELEPHONE: (505) 988-4421

TELECOPIER: (505) 983-6043

March 8, 1989

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Air-Mex Corporation First Western National Bank Building Post Office Box 249 Moab, Utah 84532

Attn: Skip Nightengale

Re: Application of Grand Resources Inc. for Approval of a Waterflood Project, San Juan County, New Mexico

Gentlemen:

This letter is to advise you that Grand Resources Inc. has filed an application with the New Mexico Oil Conservation Division seeking authority to institute a waterflood project by injection of water into the Gallup formation in its proposed Mesa Gallup Unit Area underlying Sections 10, 13, 14, 15, 23 and 24 and the N/2 of Section 25, Township 32 North, Range 18 West and Section 30, Township 32 North, Range 17 West, Mesa-Gallup Pool, San Juan County, New Mexico.

This application has been set for hearing before an Examiner of the Oil Conservation Division on March 29, 1989. You do not need to be present at the hearing, but failure to appear at the hearing or otherwise become a party of record in this case will preclude you from challenging this matter at a later date.

Very truly yours,

WILLIAM F. CARR

ATTORNEY FOR GRAND RESOURCES, INC.

WFC:mlh

cc: Marvin Rabinowitz

7-13₄ 474 378

P-106 676 406

RECLIPT FOR CERTIFIED MAIL

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CAMPBELL & BLACK, P.A.

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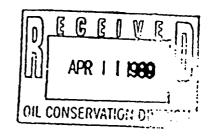
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SUITE 1 - 110 NORTH GUADALURE
POST OFFICE BOX 2208

SANTA FE, NEW MEXICO 87504-2208
TELEPHONE (505) 988-4421
TELECOPICR: (505) 983-6043

April 11, 1989

HAND-DELIVERED

William J. LeMay, Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
State Land Office Building
Santa Fe, New Mexico 87503



Re: Case No. 9637:

In the Matter of the Application of Grand Resources Inc. for a Waterflood Project, San Juan County, New Mexico

Dear Mr. LeMay:

Enclosed please find an original and two copies of Oil Conservation Division Form C-108 which is the written application of Grand Resources Inc. in the above-referenced case which has been set for hearing before a Division examiner on April 26, 1989.

Your attention to this matter is appreciated.

very truly yours,

WILLIAM FI CARR

WFC:mlh Enclosures

cc w/enclosures: Certified Mail - Return Receipt Requested

Bureau of Land Management 435 Montano Rd., NE Albuquerque, New Mexico 87107

Dugan Production Corporation Post Office Box 5820 Farmington, New Mexico 87499

Air Mex Corporation First Western National Bank Building Post Office Box 249 Moab, Utah 84532 Attn: Skip Nightengale P-106 676 392
RECEIPT FOR CERTIFIED MAIL
NOTE: See Reverser

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PS Form 3800, June 1985

P-106 676 395

RECEIPT FOR CERTIFIED MAIL

See Reversel

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PS Form 3800, June 1985

P-106 676 394

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	ISSUING BANK - NAME AND ADDRESS	APPLICATION & LETTER OF CREDIT NUMBER
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Tulsa, Oklahoma 74136	P. O. Box 702680	803100
7 77.50	Tulsa, OK 74170	AMOUNT (U.S. CHM.LARS)
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BENEFICIARY - NAME AND ADDRESS :	. ADVISING BANK - NAME AND ADDRESS	15,000.00
United States Department of Interior	ROVISING BAIL HAME AND ADDRESS	EXPIRATION DATE
Bureau of Indian Affairs		
Window Rock, Arizona 86515		6-30-90
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The undersigned Customer hereby applies to the above. Beneficiary shown herein for any cum as a second		
Grand Resources, Inc. is in default of the Oil and Gas Mining Leases and Perin Reservation in the State of New Mexico SPECIAL INSTRUCTIONS: It is a condition of this Letter of Crextended without amendment for one year hereof unless at least thirty (30) days registered mail at the address given a Credit renewed.	and that the amount claimed contained that this Letter of Credit from the present or any futi	thin Navajo Indian is due and payable. it will be automatically ure expiration date
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	Marvin Robinovicz	Precident
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PO BOX 707665 6480 SOUTH LEWIS 74170 ANGHALAN A4170 1919; 747 7981

Western National Bank

June 22, 1990

United States Department of Interior Bureau of Indian Affairs Window Rock, Arizona 86515

Re: Grand Resources. Inc. Letter of Credit #803100

Issued: 6-30-89 Amount: \$15,000.00

Gentlemen:

This letter is written to extend the expiration date on the above referenced letter of credit until June 30, 1991.

All other terms and conditions remain unchanged except the expiration date being change to June 30, 1991.

Sincerely,

Senior Vice President

Senior Vice President

ATTEST:

Sharon K. Spohn, Assistant Cashier

WLM/dh

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Marvin J. Robinowitz Name

President Title*

*If certification is signed by a party other than the injection well owner/operator a written statement of authorization signed by the owner/operator must accompany the application.

STATEMENT OF AUTHORIZATION

I(GRAND RESOURCES, INC. tion well owner/operator	hereby authorize	Marvin J. Robinowitz
to act in application	n my behalf in executing the ions, compliance reports, etcon Agency Underground Injecti	as required padam	uding permit the Environmental
Signed (ov	wner/operator)		
Date:	11/21/90		