Form 3160-5 (November 1994)

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

Lease Serial No.

FORM APPROVED OMB No. 1004-0135 Expires July 31, 1996

SUNDR	Y NOTICES AND REPO his form for proposals to ell. Use Form 3160-3 (AP	ORT	S ON WELLS	<i>ـازال``</i> اعصم م	EIVED			9389E
abandoned w	ell. Use Form 3160-3 (AP	D) fo	or such propos	als.CO	ARTEST	6. If India	an, Alic	ottee or Tribe Name
SUBMIT IN TA	IPLICATE - Other Instr	ucti	ons on revers	se side	2201109	7. If Unit	or CA	/Agreement, Name and/or No.
1. Type of Well Oil Well Gas Well	704			\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		0 177 11 12	<u> </u>	
2. Name of Operator	- Uther					8. Well N Nest		nd No. Nwood Fed 6 #1
Gruy Petroleum Mana	gement Co.					9. API W		
3a. Address		3b	. Phone No. (incl		code)			31850
P.O. Box 140907 Irvin		ــــــــــــــــــــــــــــــــــــــ	972.401.3	3111				il, or Exploratory Area TOW North
4. Location of Well (Footage, Sec 990' FNL & 1650' FWL		n)				11. County		
000 1112 0 1000 7 112	000.011007012					TTT County	, 01 1 11	
						Ed	ddy	
12. CHECK AF	PROPRIATE BOX(ES) T	O IN	IDICATE NAT	URE O	F NOTICE, RI	EPORT, O	R OT	THER DATA
TYPE OF SUBMISSION			ח	гүре о	F ACTION			
	Acidize		Deepen		Production (Start/	Resume)	0	Water Shut-Off
Notice of Intent	Alter Casing		Fracture Treat	ā	Reclamation		ā	Well Integrity
Subsequent Report	Casing Repair		New Construction		Recomplete		\boxtimes	Other Request Water
☐ Final Abandonment Notice	Change Plans		Plug and Abandor	Ö	Temporarily Aba	ındon		Disposal permission
a mai 7 touridonniem 170400	Convert to Injection		Plug Back		Water Disposal			
Gruy requests permission to	· · · · · · · · · · · · · · · · · · ·					ei Dispos	sdi Ot	D. Facility Root 1-5
14. I hereby certify that the foregoin Name (Printed/Typed)	ng is true and correct		Title					· · · · · · · · · · · · · · · · · · ·
Zeno Farris			Ma	nager,	Operations A	dministra	tion	
Signature	Fauis		Date Ju	ıne 25,	2004			
	THIS SPACE	FOR	FEDERAL OR	STATE	OFFICE USE			
Approved by				Title			Date	
Conditions of approval, if any, are certify that the applicant holds legs which would entitle the applicant to	al or equitable title to those righ			Office				
Tid- 10 II C C C1 1001	es it a crime for any serven know	vina!	and willfully to -	naka ta -	ny department as	aconou of 4	- II-is	ad States any false Gatis

Meste Kenwood Federal 6 # 1 Gruy Petroleum Management Co. Date 6/10/2004

Water Production & Disposal Information

In order to process your disposal request, the following information must be completed:

1.	Name o	οf	formations	producing	water	on	this	lease:	Morrow	

- 2. Amount of water produced from all formations in barrels per day: one barrel per day.
- 3. Attach a current water analysis of produced water from all zones showing at least the total dissolved solids, PH, and the concentrations of chlorides and sulfates (one sample will suffice if the water is commingled):
- 4. How water is stored on this lease: 300 barrel steel tank.
- 5. How water is moved to the disposal facility: trucked.
- 6. Identify the disposal facility by:
 - A. Facility Operator's Name: <u>Hughes</u>.
 - B. Name of facility or well name and number: Local Hills water $\frac{\text{disposal} \# \ \text{R6811} \text{B}}{\text{disposal}}$
 - C. Type of facility or well (WDW, WIW, ect.): WDW.
 - D. Location by 4 4 section 16 township 17 South range 30 East
- 7. Attach a copy of the state-issued permit for the Disposal Facility.

Submit to this office (414 West Taylor; Hobbs, NM 88240) the above-required information on a sundry notice 3160-5. Submit 1 original and 5 copies within the required time frame. This form may be used as an attachment to the sundry notice. Call me at 505-393-3612 if you need to further discuss this matter.

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION COMMISSION

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

> CASE NO. 7720 Order No. R-6811-B

APPLICATION OF LOCO HILLS WATER DISPOSAL COMPANY FOR AN AMENDMENT TO DIVISION ORDER No. R-6811-A, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 29, 1982, at Santa Pe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 30th day of December, 1982, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Loco Hills Water Disposal Company, seeks an order amending Division Order No. R-6811-A to remove the present maximum disposal limit of 2,500 barrels per acre per month imposed upon the salt water disposal facility authorized, therein, in Section 16, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico.
- (3) That said Order No. R-6811-A was issued by the Commission following the hearing of Case No. 7329 De Novo on July 14, 1982.
- (4) That in said Order No. R-6811-A, the Commission made, among others, the following findings:
 - "(6) That Order (3) of Division Order No. R-3221, as amended, prohibits in that area encompassed by Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, the disposal, subject to minor exceptions, of water produced

-2-Case No. 7720 Order Nc. R-6811-B

in conjunction with the production of oil or gas, or both, on the surface of the ground, or in any pit, pond, lake, depression, draw, streambed, or arroyo, or in any watercourse, or in any other place or in any manner which would constitute a hazard to any fresh water supplies and said disposal has not previously been prohibited.

- (7) That the aforesaid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water supplies designated by the State Engineer through disposal of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.
- (8) That the State Engineer has designated, pursuant to Section 65-3-11 (15), N.M.S.A., 1953 Compilation, all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except that said designation does not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination.
- (9) That the applicant seeks an exception to the provisions of the aforesaid Order (3) of Division Order No. R-3221, as amended, to permit the commercial disposal of produced salt water into the aforesaid pits at the site described above.
- (10) That the applicant proposes to install and operate an effective system, composed of holding and separating tanks, and a skimming pit, for the removal of oily and solid wastes from the waters to be disposed of into said system.
- (11) That there is no fresh water in the immediate vicinity of said disposal system, but there are wells producing fresh water some nine miles south of the proposed disposal pits.
- (12) That the native soils underlying said pits will permit the vertical percolation of some of the waters disposed of in said system.
- (13) That the vertical percolation of waters from said system should not endanger any fresh waters.
- (14) That to ensure that waters percolating from said pits move only vertically, monitor wells should be

adan marrir

-3-Case No. 7720 Order No. R-6811-B

drilled in a pattern as shown on Exhibit "A" designed to detect horizontal movement of water from said disposal area.

- (15) That in the event salt water is detected in any monitor well, Case No. 7329 should be reopened within 90 days to permit applicant to appear and show cause why the authority to use said pits for water disposal should not be rescinded.
- (16) That the maximum volume of produced water to be disposed of through said system should not exceed 2500 barrels per acre per month.
- (17) That a freeboard of a minimum of three feet should be maintained at all times."
- (5) That said Order No. R-6811-A did contain provisions limiting the maximum disposal volume to 2500 barrels per acre per month, requiring maintenance of a minimum three foot freeboard in all pits and the drilling and equiping of monitor wells.
- (6) That the applicant now seeks the amendment of said Order No. R-6811-A to remove only the 2500 barrels per acre per month disposal volume limitation.
- (7) That the application was opposed by a surface and ground water interest owner in the area which might be affected by the disposal operation.
- (8) That the applicant presented evidence designed to demonstrate that the change in disposal volume would not significantly alter the hydrologic regime established by institution of the disposal operation nor threaten contamination of any fresh water supplies.
- (9) That the protestant presented new evidence which tended to show that there were both southeast and southwest trending slopes on the interface between the Santa Rosa formation and the Rustler formation under the disposal pits.
- (10) That the protestant further presented testimony tending to show that an impermeable clay barrier exists at the base of the Santa Rosa formation which would effectively stop the vertical infiltration of the disposed waters into the Rustler formation.

-4-Case No. 7720 Order No. R-6811-B

- (11) That if the disposed water which percolates through the Santa Rosa formation from said pits cannot move into the Rustler formation, it may move laterally through the Santa Rosa formation where it may endanger fresh water supplies.
- (12) That in order to verify that any water percolating from said pits ultimately enters the Rustler formation and does not move laterally within the Santa Rosa formation, the well monitoring system provided for in said Order No. R-6811-A should be expanded.
- (13) That the additional monitor wells should be drilled to the Rustler formation and should be located at points approximately 250 feet north of the present monitor well No. 9 located to the east of the disposal facility, approximately 150 feet from monitor well No. 2 along a line connecting monitor well 2 and monitor well 3, and at a third location approximately midway between the present monitor holes No. 4 and 5 all as depicted on Exhibit "A" to said Order No. R-6811-A.
- (14) That provided that these additional monitor wells are drilled and utilized in the same manner as the original monitor wells, no increased threat to fresh water supplies should result from lifting the 2500 barrels-per-acre disposal limitation contained in Order No. R-6811-A.
- (15) That the application should be approved and the additional monitor wells should be required.
- (16) That the granting of this application restricted in the manner set forth above will not cause waste, or impair correlative rights, or endanger designated fresh water supplies.

IT IS THEREFORE ORDERED:

(1) That the application of Loco Hills Water Disposal Company for an amendment of Division Order No. R-6811-A to remove the 2500 barrel per acre per month disposal limitation included in Order No. (1), thereof, is hereby approved.

PROVIDED HOWEVER, that this order shall not become effective until the applicant has drilled and completed three additional monitor wells located approximately (1) 250 feet to the North of present monitor hole No. 9, (2) 150 feet from present monitor well No. 2 along a line connecting monitor well No. 2 and 3 and (3) midway between the present monitor holes Nos. 4 and 5.

PROVIDED FURTHER, that each of said monitor wells shall be drilled to the top of the Rustler formation and that such wells

Ja sa

been Proces

Case No. 7720 Order No. R-6811-B

shall be cased and operated in the same manner as those monitor wells required by Order No. R-6811-A.

(2) That jurisdiction of this cause is 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.

OIL CONSERVATION COMMISSION

ALEX J. ARMIJO, Member

ea helle ED KELLEY, Member

JOE D. RAMEY, Member & Secretary

CAPITAN CHEMICAL WATER ANALYSIS REPORT

Gruy Petroleum

Neste Kanwood 6-1

Date Sampled : 05/12/04

Lease Name : Well Number :

Capitan Rep. : Joe Hughes Company Rep. : Mike Braswell

Location

Eddy County, N.M.

ANALYSIS								
pH	7.5							
Specific Gravity @ 60/60 F.	1.039							
CaCO3 Saturation Index @ 80 F.	+1.095		'Calcium Carbonate Scale Possible'					
@ 140 F.	+2.025		'Calcium Ca	erbona	ste Scale Possible			
Dissolved Gasses								
Hydrogen Sulfide	0		PPM					
Carbon Dioxide	15 1		PPM					
Dissolved Oxygen	NR		PPM					
Cations	mg/L	1	Eq. Wi.	=	MEQIL			
Celcium (Ca++)	1,500	1	20,1	=	74.63			
Magnesium (Mg++)	1,519	1	12.2	=	124.49			
Sodium (Na+) Calculated	23,550	1	23.0	=	1.023.92			
Barlum (Ba++)	Not Determined	1	68.7	=	0,00			
Agions								
Hydroxyl (OH-)	0	1	17.0	=	0.00			
Carbonate (CO3=)	Û	1	30.0	=	0.00			
Bicarbonate (HCO3-)	1.806	1	61.1	=	29.55			
Sulfate (SO4=)	507	1	48.8	=	10.39			
Chloride (Cl-)	42,000	,	35.5	=	1,183.10			
Other								
Soluble Iron (Fe)	S	1	18.2	=	0.27			
Total Dissolved Solids	70,882							
Total Hardness As CaCO3	10,000							
	pH Specific Gravity @ 60/60 F. CaCO3 Saturation Index @ 80 F. @ 140 F. Dissolved Gasses Hydrogen Sulfide Carbon Dioxide Dissolved Oxygen	pH 7.5 Specific Gravity @ 60/60 F 1.039 CaCO3 Saturation Index @ 80 F +1.095 @ 140 F +2.025 Dissolved Gasses Hydrogen Sulfide 0 Carbon Dioxide 151 Dissolved Oxygen NR Cations mg/L Calcium (Ca++) 1,500 Magnesium (Mg++) 1,519 Sodium (Na+) Calculated 23.550 Barlum (Ba++) Not Determined Anions 0 Hydroxyl (OH-) 0 Carbonate (CO3=) 0 Bicarbonate (HCO3-) 1.806 Sulfate (SO4=) 507 Chloride (CI-) 42,000 Other 5 Total Dissolved Solids 70,882	### PH	## PH	PH 7.5			

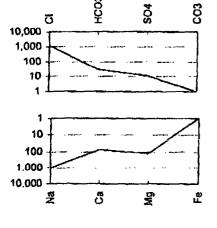
4.953

0.150

Logarlthmic Water Pattern

20, Resistivity (Measured)

Calcium Sulfate Solublilty @ 90 F.



PROBABLE MINERAL COMPOSITION

@ 82

Degrees (F)

Ohm/Meters

COMPOUND	Eq. Wt.	x	MEQ/L	=	mg/L
Ca(HCO3)2	81.04	X	29,55	=	2.395
CaSQ4	68.07	X	10,39	=	7 07
CaCl2	55.50	X	34.69	±	1.925
Mg(HCO3)2	73.17	, x	0.00	.=	0
MgSO4	60.19	X	0.00	=	0
MgCl2	47.62	X	124,49	=	5,928
NaHCO3	84.00	X	0.00	=	0
NaSQ4	71,03	Х	0.00	22	Q
NaCl	58.46	X	1.023.92	==	59,859

Form 3160-9 (December 1989)

RR

I & E CFO

UNITED STATES DEPARTMENT OF THE INTERIOR

	
	Identification
IID	
Lease	NMLC029389E
CA	
Unit	

04-DC-266

Certified Mail - Return Receipt Requested 70023150000320601743	i	ARTMEN EAU OF 1					IID	029389E
Hand Delivered Received by	NOTICE O	CA Unit PA						
Bureau of Land Management Office			Opera	itor				
CARLS	BAD FIELD OFFICE			GRU	JY PETROLE	UM MAN	AGEMENT C	0
Address 620 E CARL	Addre	ess		OX 1409 3 TX 75				
Telephone	505-234-5906		Atten	tion				
Inspector	CLEGHORN		Attn	Addr				
Site Name NESTE KENWOOD FEDER	Well or Facility AL 6 C	1/4 1/4 Section NENW 6	Township 18S	Range 31E	Meridian NMP	County	EDDY	State NM
(FACILITY) THE FOLLOWING VIOLA	Well or Facility TION WAS FOUND BY BU	1/4 1/4 Section UREAU OF LAN		Range ENT INSPECTO	Meridian ORS ON THE DAT	County E AND AT	THE SITE LISTE	State ED ABOVE
Date	Time (2	24 - hour clock)		Viola	ition		Gravity of Vic	olation
06/22/2004		08:30		ONSHORE OR	DER #7 III,B,2		MINOI	R
Corrective Action To Be Completed By	Dat	e Corrected		Assessment for l	Noncompliance		Assessment Reference	
07/24/2004							43 CFR 31	63.1()
When violation is corrected, sign this n Company Representative Title Company Comments	otice and return to above addr r. Op evations for	ess. Admin Weter di	Signature	Ze	no Fo	ieny	Date	25-26
		<u></u>	WARNIN	G				
Incidents of Noncompliance correarlier. Each violation must be coaddress shown above. Please not not comply as noted above under Civil Penalties (43 CFR 3163.2).	orrected within the prescri that you already may hav "Corrective Action To Be	bed time from reve been assessed Completed By"	eceipt of this I I for noncomp ' you may incu	Notice and repor liance (see amou er an additional a	ted to the Bureau int under "Assess assessment under	of Land Moment for No. (43 CFR.)	Ianagement offic loncompliance").	e at the If you do also incur
Section 109(d)(1) of the Federal C Title 43 CFR 3163.2(f)(1), provide notices, affidavits, record, data, of day such violation continues, not	es that any person who "ke or other written information	mowingly or wil n required by th	llfully" prepare	es, maintains, or	submits, false, it	naccurate.	or misleading ren	orts.
A person contesting a violation shapecing of the Incidents of Noncon Interior Board of Lands Appeals, Management office for further in	npliance with the appropr 801 North Quincy Street,	or review of the liate State Direct	Incidents of N	R 3165.3). The	This request mus State Director re	view decisi	on may be appead	led to the
Signature of Burear of Land Manager	nent Authorized Officer					Date /2	2/04 Time	0910
- your	TWI	EOD	OFFICE US	CONLY		1 7/2	-101	V (((
Number 53	Date	Assessm		Pena	alty		Termination	
Type of Inspection							<u> </u>	

600 East Las Colinas Blvd. Suite 1100 Irving, TX 75039 972-401-3111 469-420-2710

Gruy Petroleum Management Co

July 9, 2004

United States Department of the Interior Bureau of Land Management Carlsbad Field Office 620 East Green Street Carlsbad, NM 88220 Attn: Mr. Don Cleghorn

Re: Written Order #04-DC-266

Dear Mr. Cleghorn:



Enclosed, please find the documents you requested regarding water disposal for the Neste Kenwood 6 Federal No. 1.

If you need anything else, please feel free to contact Zeno Farris at 972-443-6489.

Thanks for your assistance!

Sincerely,

Natalie Krueger
Production Assistant

Accepted for record . History

nkrueger@magnumhunter.com