



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Betty Rivera

Cabinet Secretary

October 11, 2002

Lori Wrotenbery

Director

Oil Conservation Division

Dugan Production Corporation
709 E. Murray Dr
PO Box 420
Farmington, New Mexico 87499-0420

Attn: Mr. John Alexander

**Re: Injection Pressure Increase
Locke SWD No. 1
San Juan County, New Mexico**

Dear Mr. Alexander:

Reference is made to your verbal request on October 11, 2002, to increase the surface injection pressure on the above referenced SWD well. This request is based on a step rate test conducted on the well on October 9, 2002. After reviewing test results, we feel an increase in injection pressure is justified at this time.

With size and type of tubing remaining 2 3/8 inch, you are authorized to increase the surface injection pressure to the following:

Well and Location	Maximum Surface Injection Pressure
Locke SWD Well No. 1 SWD (API: 30-045-25630) 1120 FSL 1120 FEL, Sec 3, T29N, R14W, NMPM, San Juan County	1100 PSIG Water

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

Lori Wrotenbery (wvj)

Lori Wrotenbery
Director

cc: Oil Conservation Division – Aztec
Files: SWD-833; IPI 2002

DUGAN PRODUCTION CORP.

P.O. Box 420
709 E. Murray Drive
Farmington, NM 87499 (87401)
Office: 505-325-1821
FAX: 505-327-4613

FAX TRANSMITTAL

DATE: April 2, 2002 TIME: 0745

TO: Will Jones
COMPANY: NMOCD

FAX NO. 505-476-3471 TELEPHONE NO.

You should receive 2 page(s) including this cover sheet. If you did not receive all pages or are unable to read any pages, please contact:

FROM: John Alexander TELEPHONE NO. (505)325-1821

Will:

I have attached a correction to the depths included in the procedure for conversion of the Locke No. 1 SWD well. If I change the actual perforated interval, I will report so on the subsequent report sundry notice. I may not include the entire Menefee interval of the Mesaverde in the actual completion, but I requested permission to include that interval in the application. This will allow me the option to make that decision as I work on the well.

Thanks
John Alexander

PROCEDURE TO CONVERT LOCKE 1 TO INJECTION SERVICE

1. Re-attach production casing to surface and install well head.
2. Plug Gallup and Dakota formations to BLM requirements.
3. Set a cast iron bridge plug at 3700'.
4. Pressure test casing at 1500 psi.
5. Run a cement bond log over the injection interval. The log will be pulled to the top of cement. NMOCD will be notified to observe this operation. The remainder of the procedure will be contingent on the recognition of adequate bond to assure injection zone isolation.
6. Perforate the Point Lookout section of the Mesaverde from 3515' – 3550' in selected sand zones with 4 jsf. Perforate the Menefee section of the Mesaverde from 3190' – 3255' and 3480' – 3500' in selected sand zones with 4 jsf. (Exact depths may change after bond log is completed.)
7. Preparation of the well for injection is covered in other parts of this application.

GEARHART**CEMENT BOND LOG**

FILING NO.	COMPANY <u>SOUTHLAND ROYALTY COMPANY</u>					
<i>HW</i>	WELL <u>LOCKE NO.1</u>					
	FIELD <u>BASIN DAKOTA</u>					
	COUNTY <u>SAN JUAN</u> STATE <u>NEW MEXICO</u>					
	LOCATION <u>1120'FSL x 1120'FEL</u>				Other Services <u>Jet Perforate</u>	
SEC <u>3</u> TWP <u>29N</u> RGE <u>14W</u>						
Permanent Datum <u>GROUND LEVEL</u> Elev. <u>5476</u>						
Log Measured from <u>K.B.</u> , <u>12</u> Ft. Above Permanent Datum						
Drilling Measured from <u>K.B.</u>						
Elevations: KB <u>5488</u> DF <u>5487</u> GL <u>5476</u>						
Date	<u>6-23-83</u>		Type Fluid in Hole		<u>H₂O</u>	
Run No.	<u>ONE</u>		Dens. Visc.			
Depth-Driller	<u>----</u>		Max. Rec. Temp.			
Depth-Logger	<u>5886</u>		Est. Cement Top			
Btm. Log Interval	<u>5879</u>		Equip. Location		<u>5208/7514 29-047</u>	
Top Log Interval	<u>600</u>		Recorded By		<u>J.W. Norton</u>	
Open Hole Size			Witnessed By		<u>Mr. Ross Lankford</u>	
CASING REC.	Size	Wt/Ft	Grade	Type Joint	Top	Bottom
Surface String	<u>8 5/8</u>	<u>24</u>	<u>K-55</u>		<u>SURFACE</u>	<u>237</u>
Prot. String						
Prod. String	<u>4 1/2</u>	<u>10.4</u>	<u>K-55</u>		<u>SURFACE</u>	<u>5988</u>
Liner						
PRIMARY CEMENTING DATA						
STRING	Surface	Protection	Production	Liner		
Vol. of Cement						
Type of Cement						
Additive						
Additive by %						
Retarder						
Retarder by %						
Wt. of Slurry						
Water Loss						
Drill. Mud Type						