Rovember 1983) (formerly 9-330)			DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT										5. Lease Designation & Serial #: SE-079060			
		T ~					TON	7 3370	T 0.0		- 6. 11	f Indian,	Allotte	ee/Tribe Name		
1a Type o		T CC	MPLETION						LOG	IVED	7. 1	Jnit Agre	ement N	ame:		
1a. Type of Well: oil well ges well _X b. Type of Completion: new well _X work over _								/	ourer	_111		ontieas	: Bilmoo	Unit		
	ack		iff. resvr.								8.	farm or l				
2. Name of					Nichols Co					<u> </u>		lortheast		Unit		
3. Address	of Ope	rator:	P.O. Bo	x 123	7, Durango	,Colora	do 8	13027123	5p	H.eTeH.	H.M. 1	Jell No.: 413R				
4. Locatio	on of Wel	ll: (Re	eport location	clea	rly,in acc	ordance	with	any Sta	te requ	irements)*	1	ield and Basin Fru		r Wildcat: Coal		
At surface At top prod. interval reported below 350' FNL, 460' FEL At total depth										11. Sec., T.,M., or Block and Survey or Area: Sec. 20, T30N, R7W						
							Pe	ermit No.	: 30-03	9-24946	12. 0		Parish:	13. State:		
15. Date Spudded: 16. Date TD Reached: 10-1-90 12-7-90			17. Date Compl. (ready to produce): 18. Elev. (DF, 12-18-90 63													
20. Total Depth, MD & TVD: 21. Plug 3213'			Back TD, MD & TVD: 22.				f Mult. C Many* N,		23. Inte	rvals	Rotary TD	Tools	Cable Tools			
24. Producing Interval(s), of this completion - Top, Bott Fruitland Basin Coals, open hole completion from							om, Name (MD and TVD)*:			25.	25. Was Directional Survey Made? Yes					
26. Type Electric and Other Logs Run: 27. Was Well Cored?																
					lud Log								No			
28.		•		CAS	ING RECORD	(Repor	t ali	strings	set ir	well)						
Casing	Size	We	eight, LB/FT	Dep	oth Set (Mi))	Hole Size			Cementing Rec		cord Amount Pulled				
9.625" 36# K-55			313'			12.25"		295	295 cf_of Class I		B 7 Bbls Circ. Cement					
7.000"		23	23# N-80		29201		8.75"		810 of Howco Lite		•					
							1 1		-148 cf-Class B			15 Bbls Circ. Cen		rc. Cement		
		ļ						· · ·		3						
			LINER RECOR	10)			: <u>.</u>		TUBING		RECORD				
Size	Тор (MD)	D) Bottom (MD) Sacks Cmt* Screen (MD)		Šiz	e Der	Depth Set (MD) Packer Set (MD)			er Set (MD)						
5.500"	28	1371	32121		None		N/A		2.87	5"	3160	N/A		N/A		
31. Perfor	ation Re	rord (Interval, siz	e and	number):			32.		ACID SHOT	EDACTII	E CEMEN	IT SOLIEE	75 STC		
			incorvacy or a	- u.n.	ricanizati y t						FRACTURE, CEMENT SQUEEZE, ETC. Amount and Kind of Material Used					
			perfed Liner		Hole 2920	י 3213-יכ	1									
2927-2967'; 2986-3045'; 3084-3202' 2920' - 3213' (8 HPF, 0.625)								3'	Natural, stress relieved the coal zones.							
33.	.					PRO	ODUCT	ION		L	·					
Date First Waiting					nod (Flowin					and type of gauge	pump):		ll Status	s (shut-in):		
Date of Tes 12-18-9			s Tested: 1 hr.		ke Size: pitot	Prod'i		. 1	Bbl I/A	Gas-MCI N/A	Wa	eter-Bbl N/A	Gá	as-Oil Ratio		
Flow. Tubing Press: Casing Pressure 1250 psig 1245 psig					Oil-Bbl N/A			Gas-MCF 10,813 ACC		ter-Bbi	RECQ.	Gravity-API				
· · · · · · · · · · · · · · · · · · ·		Gas (S	old, used for	fuel,	L		Vent					Witness		· · · · · · · · · · · · · · · · · · ·		
35. List of												N RESOU				
36. I hereb Signed: <u> </u>			the foregoing	and a		nformati 'W. Will				orrec has d ninistrative	· · · · · · · · · · · · · · · · · · ·			able records		
				(See I	nstruction	ns and S	paces	s for Ado	litional	. Data on Re	verse S	ide)				

Submit in Duplicate*

UNITED STATES

Form 3160-4

4 × 1...

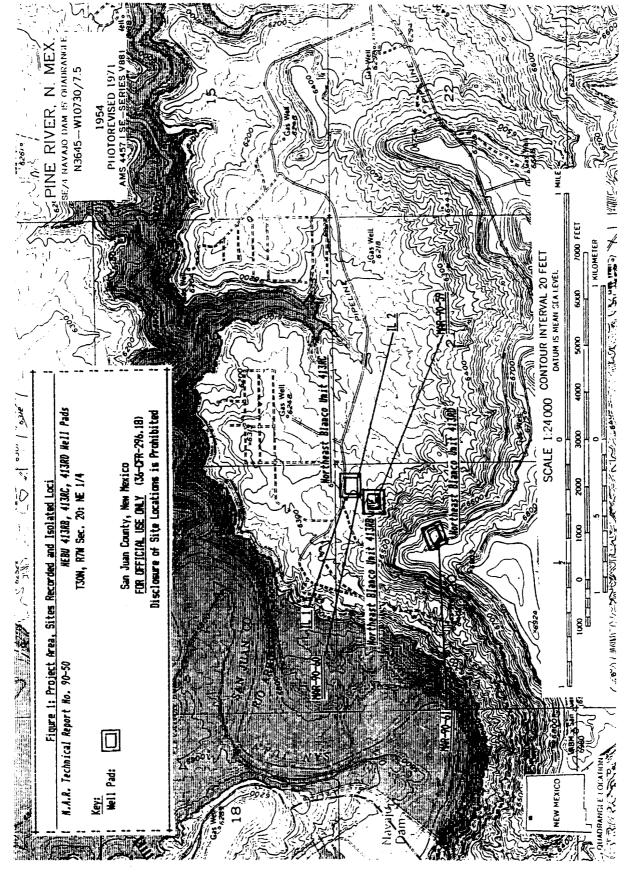
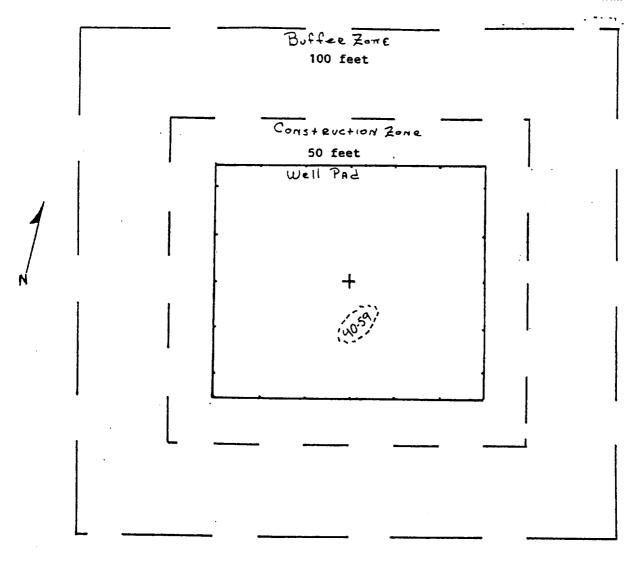


Figure 1



Pigure 2

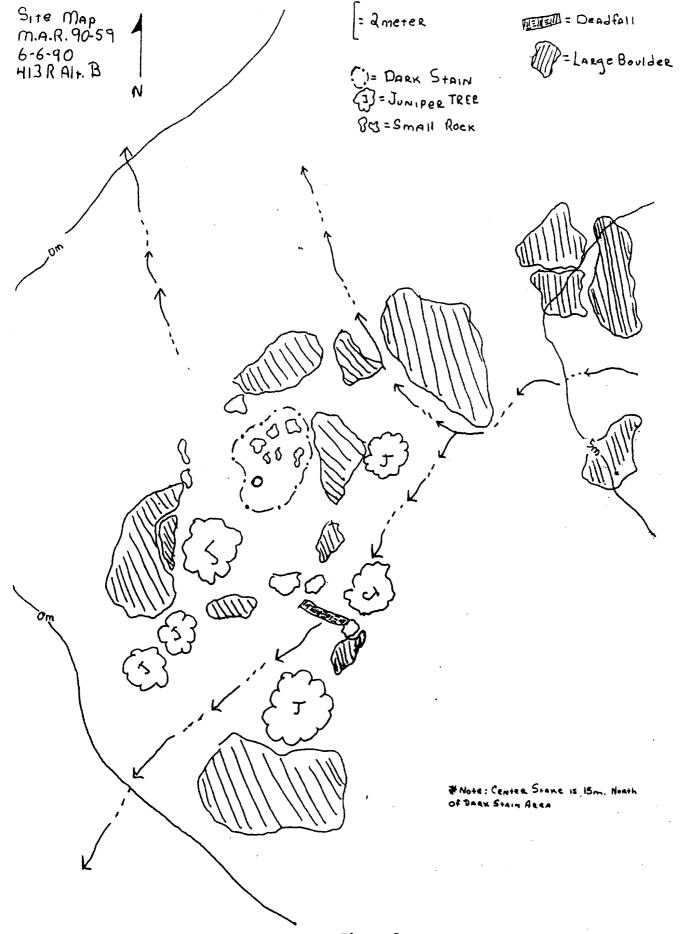


Figure 3

PROJECT AREA

Proposed Well NEBU 413 RC

Legal Description: T. 30N, R. 7W, Section 20, NE 1/4 NE 1/4 NE 1/4 Section 20, 350' F/NL, 460' F/EL

U.T.M.: Zone 13, 476100 N, 269250 E (center stake)

New Mexico Prime Meridian, San Juan County, New Mexico, 6298' Elevation

Map Source: U.S.G.S. 7.5' Pine River, New Mexico 1954 (Photorevised 1971)

Land Jurisdiction: State Trust Lands (minerals), Private Elks Lodge (surface)

Project Area: 300' x 250' (well pad), 400' x 350' (well pad w/construction)

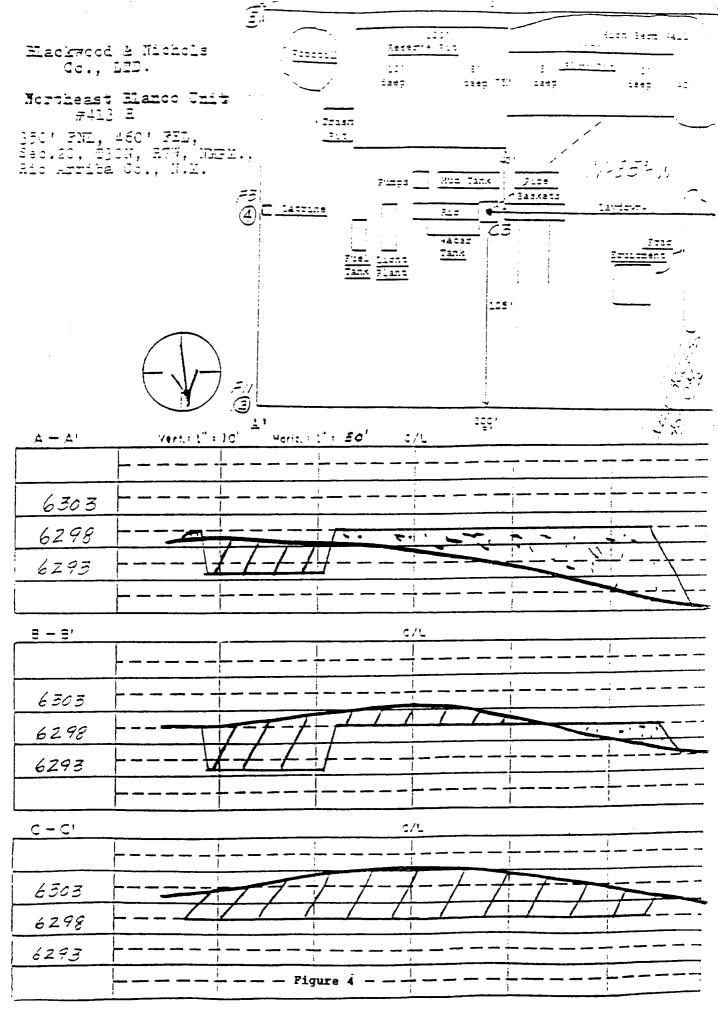
Surveyed Area: 600' x 550' (well pad w/construction and buffer zones)

Acres: 7.576

Environment: The project area is located on Smith Mesa on the south side of the De Lasso Loos Road, south of the Navajo Reservoir (Figure 1). The area slopes gently upslope to the south, with small drainages running west to east. There are sandstone and gravel outcrops across the south edge of the pad area, and a powerline runs over the south construction zone. The south buffer zone has more sandstone outcrops, gravel areas, and the drainages are deeper. The sandy loom soil shows depth of up to 40cm in the drainages. The De Lasso Loos road is in the north construction zone and an open pipeline trench is in the north buffer zone. The pad area has a 40% scrubland cover consisting of sagebrush, broad leaf yucca, needle and thread, galleta and indian rice grasses; club cholla, barrel cactus, and a few pinyon and juniper trees. The east, west, and south buffer zones have a 10-15% woodland cover consisting of pinyon, juniper. grasses, forbs, Morman Tea, yucca, prickly pear cactus and sagebrush. Signs of deer, rabbits and cattle were seen. The weather at the time of the survey was hot and clear. Current use is for energy development and recreation.

Project Description: This is the third alternate location for the NEBU 413R (Figure 4). This was a Class III survey. This area is north of the NEBU 413RB location.

Cultural Resources: One archaeological site and two isolated loci (IL) were found during the survey. The IL's are described in Table 1. The site (figures 1 and 5) is a Navajo Gobernador Phase site located on the outside edge of the construction zone nearest the southwest corner of the proposed pad.



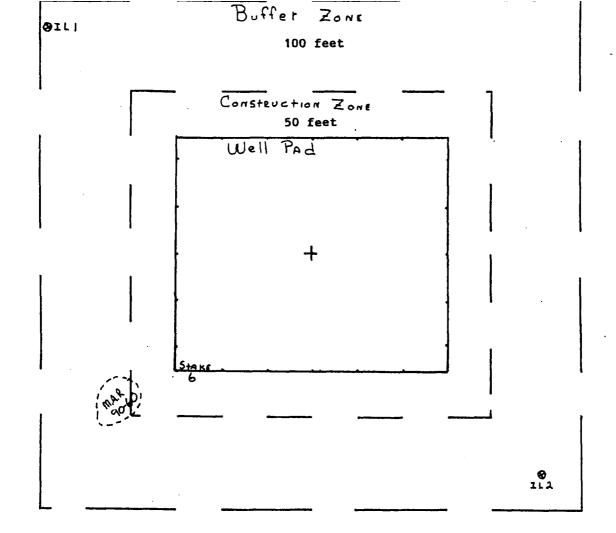
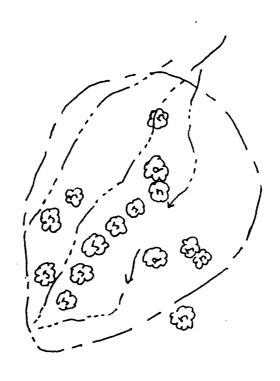
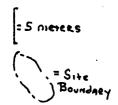


Figure 5

Site Map M.A.R. 90-60 413 C 6-12-90





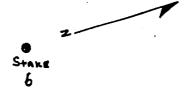


Figure 6

TABLE 1: Isolated Loci Descriptions

IL No. 1	U.T.M. Zone 13 Northing Easting 4076140 269165		Description One gray siltstone tertiary core reduction flake 60mm long, 32mm wide, 25mm thick.
2	4076040	269310	Four pieces of fire-cracked rock; one gray fossiliferous chert (with red & white inclusions) scraper made by retouch of the right lateral margin of a tertiary core reduction flake 68mm long, 37mm wide, 20mm thick.

Key: Both IL's have the following information in common: T.30N, R.7W, Sec. 20, NE 1/4 NE 1/4 NE 1/4; N.M.P.M.; Rio Arriba County; U.S.G.S. 7.5' Pine River, New Mexico 1954 (Photorevised 1971) map; Woodland; on a wide bench of Smith Mesa.

Recommendations: The site is in the southwest corner of the project area on the edge of the construction zone, 18 meters (approximately 54') from stake 6. Archaeological clearances is recommended with the stipulation that construction be monitored and that no construction zone be used for 50' either side of stake 6 (southwest corner stake).

PROJECT AREA

Proposed well NEBU 413RD

Legal Description: T. 30N, R. 7W, Section 20, SE 1/4 SW 1/4 NE 1/4

Section 20, 1600' F/EL, 2250 ' F/NL

U.T.M.: Zone 13, 475530 N, 268890 E (center stake)

New Mexico Prime Meridian, San Juan County, New Mexico, 6740' Elevation

Map Source: U.S.G.S. 7.5' Pine River, New Mexico 1954 (Photorevised 1971)

Land Jurisdiction: Bureau of Land Management, Farmington Resource Area

Project Area: 500' x 500'

Surveyed Area: 500' x 500' (Class II reconnaissance)

Acres: 5.739

Environment: The project area is located on the first bench down from Smith Mesa (Figure 1). The area is a level mesa bench, with numerous shallow drainages. There is a 10-15% woodland cover consisting of very old juniper and pinyons, both with stabilized areas of soil and pine duff; Morman Tea, broad leaf yucca, prickly pear cactus, and minimal grasses and sagebrush. The soils are a sandy loam, with minimal shale and sandstone outcrops. The area shows use by deer and rabbits. The weather at the time of the survey warm and partly cloudy.

Project Description: This was a Class II reconnaissance survey of an alternate location of the NEBU 413R on a bench directly above the original location (see project description for 413R-B). No plat is available for this location.

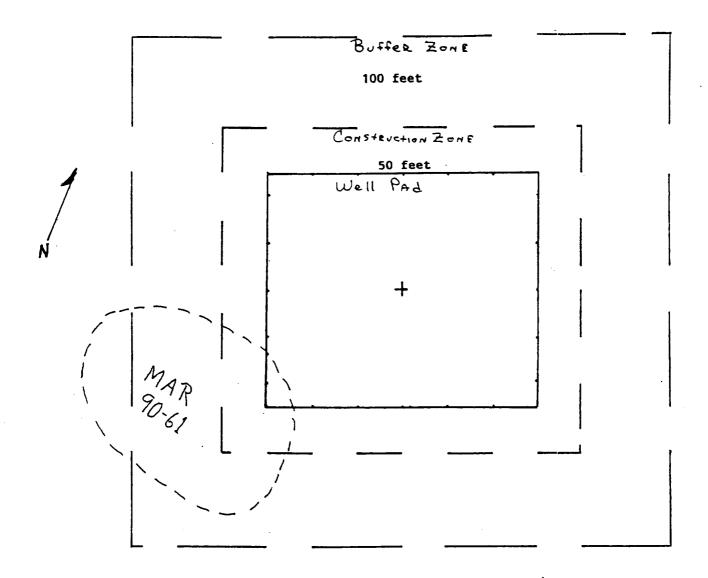
Cultural Resources: One archaeological site was found in the proposed area. Site MAR-90-61 is a Navajo Gobernador Phase site (Figure 0) located in the southwest pad and buffer zone area (pad never staked).

Recommendations: Archaeological clearance is not recommended.

REFERENCES

Moore, Susan K.

1990 An Archaeological Survey of Well NEBU 413R south of Navajo Reservoir. Moore Anthropological Research, Technical Report No. 90-30A.



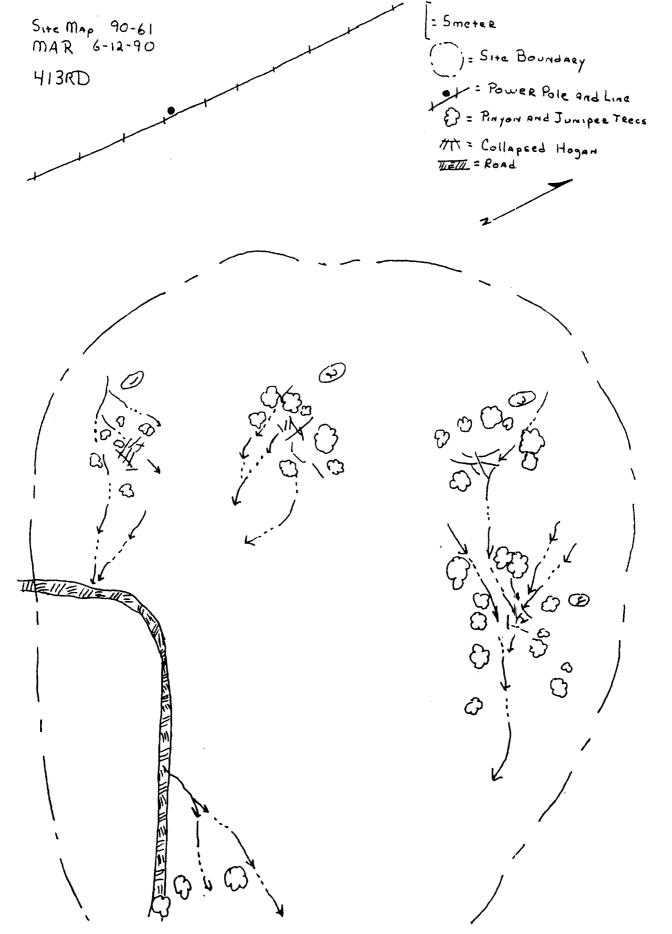


Figure 8