GW - 28

REPORTS

YEAR(S):

1986



United States Department of the Interior

GEOLOGICAL SURVEY Water Resources Division Rm. 115 Federal Bldg. Cathedral Place Santa Fe, NM 87501

September 16, 1987

Zeke Sherman Navajo Refinering, Co. P.O. Box 159 Artesia, NM 88210

Dear Zeke:

Our Carlsbad office is sending the following:

- Station description use reference marks to get gage datum for a survey.
- Rating curve use 81,700 cfs to determine a gage height in feet for the elevation of the 100 year flood discharge.

Yours truly,

Scott Waltemeyer

TECHNIQUES FOR ESTIMATING FLOOD-FLOW FREQUENCY FOR UNREGULATED STREAMS IN NEW MEXICO

By Scott D. Waltemeyer

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations Report 86-4104

Prepared in cooperation with the

NEW MEXICO STATE HIGHWAY DEPARTMENT



Albuquerque, New Mexico

1986

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information write to:

District Chief U.S. Geological Survey Water Resources Division 505 Marquette NW, Room 720 Albuquerque, New Mexico 87102 Copies of this report can he purchased from:

U.S. Geological Survey
Books and Open-File Reports
Federal Center, Building 41
Box 25425
Denver, Colorado 80225
(303) 236-7476

Table 3. Flood-frequency characteristics for streamflow-gaging stations - Continued

Station number	Years of record	Discharge, in cubic feet per second, for indicated exceedance probabilities								
		0.50	0.20	0.10	0.04	0.02	0.01			
		Southeast	mountain 1	region (3)	- Conclude	ed				
08405050	24	102	241	372	586	782	1,010			
08405100	13	2,880	4,950	6,600	8,980	11,000	13,200			
08405500	37	2,630	10,500	21,300	44,800	71,800	109,00			
08408500	45	4,040	11,800	21,300	40,800	62,900	93,600			
08480650	23	964	1,920	2,750	4,060	5,220	6,550			
08480700	25	123	366	636	1,130	1,630	2,26			
08481000	22	2,080	4,990	7,810	12,500	16,800	21,90			
08481100	25	257	941	1,810	3,570	5,480	8,02			
08481500	35	722	1,760	2,790	4,530	6,180	8,17			
08482000	11	2,230	4,900	7,340	11,300	14,800	18,900			
		So	utheast pla	ins region	1 (4)					
08379300	28	1,590	3,820	6,130	10,300	14,500	19,700			
08379500	62	6,610	12,300	17,300	25,000	31,900	39,900			
08379550	11	185	558	1,020	1,950	3,000	4,45			
08379600	31	17	61	123	263	433	683			
08380300	23	103	431	939	2,200	3,850	6,420			
8380500	66	621	1,660	2,820	5,040	7,380	10,500			
08381000	57	467	1,190	1,970	3,420	4,910	6,840			
8382000	12	2,730	4,100	5,100	6,490	7,600	8,790			
08382500	31	3,440	7,060	10,400	15,900	20,900	27,000			
8383000	55	8,510	18,100	27,100	42,200	56,400	73,600			
8383500	44	9,400	16,500	22,300	31,000	38,600	47,200			
8384500	22	8,630	15,000	20,300	28,200	35,100	42,700			
8385530	20	31	139	314	763	1,370	2,350			
8385600	31	1,560	3,680	5,860	9,750	13,600	18,500			
8385670	20	420	807	1,150	1,690	2,170	2,740			
8393600	24	12	71	186	532	1,060	2,000			
8396500	27	10,300	21,100	31,200	47,800	63,200	81,700			
8480150	22	1,280	2,460	3,250	5,190	6,710	8,49			

LEVEL SUMMARY

•	Ting.	• •				•				,	
SAS ON P257-	RM 4	RM 3	4-3-8	3-23-81	3-13-75	3-25-7/	2.16-62	4-11-62	1-12-56	DATE	
estimated square	STATE HAY BRAIN AT 1 STATE HUY ON AT. BANK Chickel Square	CHAILTED SO	CLARKE &	MCCRACKSN TO PARGAS	Much Much Nogers	Rogers	Cranston Ostrander	Ostrandor Cranston		PARTY	SIA. / 2
97	PENCE ST	SQUIRE IN B		21.46	21.46	Not run	2146	21.46	21.43	RM 1	LECOS K
carner of	COLUMN P. 25 COLUMN P. 25 COLUMN P. A. W. COLUMN P. P. COLUMN P. P. COLUMN P. P. COLUMN P. P. COLUMN P. CO	IN COMPETENT		21.46	21.46	21.46	21.46	21.46	١	RM 2	t-11-42
upstra	13386			1	* 21.48	21.48	21.48	21.48	1 .		USGS OM P 257
upstram side of	75 (STAMPED EL. 334 25' EAST OF TELE PENCE. of Counstream side	STREAMUARD C	11.	12.43 11.72	RM3 R					FOUND	REFERENCE POINTINSIDE STAFF
7/8	P 233	CORWER	1.72	72	RM4 RM5					_	ENC
lest bridge	(STAMPSD EL. 3303.67) LOCATED 1 EAST OF TELEPHONE POLE. 100 (STAMPSD EL 3303.92) L NCE. 100 (STAMPSD EL 3303.92) L	C OF LEFT	86.1	11.98	MS	·				LEFT	REFERENCE POINT INSIDE STAFF
abotore	L. 10	A-FRANC				·				DIFF.	
*	DOWNSTASAM FROM 6 CATED DOWNSTASAM Obethant	ME SUPPORT	0		0	Found to have settled . 05f.	Found OK - rese correct on steel channel backing	Opper sections of section 3.32ft found reading a		GAGE	OUTSIDE
	7 6				Ö	. 1	,	15 6 7 4 px			
	APPRIX 135' ON		SET OUTSIDE STAFF AT NEW 6.4	ESTABLISHED NEW RM'S NEAR NEW GASE LOCATED 250 AT UPITREAM FROM OLD SITE	^	Not reset	Lower 10. ft. section of gage well replaced	ok- alphiceset correct		REMARKS	



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS

September 9, 1987

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

CERTIFIED - RETURN RECEIPT REQUESTED

Mr. David Griffin
Environmental Affairs Superintendent
Navajo Refining Company
P. O. Drawer 159
Artesia, New Mexico 88210

Re: Navajo Refinery Discharge Plan, GW-28

Dear Mr. Griffin:

On August 4, 1987 you received correspondence from this office, dated August 3, 1987, informing you of the necessity for OCD to resample selected wells in the pond area. This resampling was required due to inconclusive laboratory results obtained from our previous sampling trips. Resampling was conducted on Wednesday, August 12, 1987. The laboratory results from this trip have not been received, therefore, the OCD is not prepared to make a decision on discharge plan approval before the September 15, 1987 expiration date of the current extension to discharge without an approved discharge plan.

Pursuant to Water Quality Control Commission Regulation 3-106.A Navajo Refining Company is hereby granted a 120 day extension, to January 15, 1988, to discharge without an approved discharge plan at its Artesia Refinery. This extension will allow for the receipt and evaluation of the additional sampling results, issue public notice and allow for public comment. In the meantime, you are requested to respond as soon as possible to OCD letters of August 3 and August 27 so that remaining issues may be resolved.

