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Hilc PRO	P F R	Distribution: BLM 4 Copies Regulatory Accounting Well File Revised: March 9, 2006 tatus RELIMINARY A INAL A EVISED A ate: 11/14/22						
SURFACE DOWN Type of Completion NEW DRILL REC	DD 🗌 COMMINGLE 🔀	D	PI No. 30-039-21262 HC No. DHC5218 ease No. NMNM03471 Federal					
Well Name San Juan 29-6 Unit					/ell No. 3A			
San Juan 29-6 UnitUnit LetterSectionD28	Township 29N	Range 6W	Footage 1150' FNL & 870' FWL		County, State io Arriba County, New Mexico			
Completion Date	Test Method							
	HISTORICA	AL 🗌 FIEI	LD TEST 🛛 PROJECTED 🗌	OTHE				
JUSTIFICATION OF ALLOCATION: Hilcorp requests to switch from a fixed allocation to a subtraction method based on additional information gathered from gas analysis. The base formation is the Mesaverde and the additional formation commingled is the Fruitland Coal. The subtraction method applies an average monthly production forecast to the base formation using historic production. All production from this well exceeding the forecast will be allocated to the Fruitland Coal. After 4 years production will stabilize. A production average will be gathered during the 5 th year and will be utilized to create a fixed percentage based allocation. Oil allocation will not change and will remain a fixed rate of 46% MV & 54% FC for 5 years. After 5 years oil will be reevaluated and adjust as needed based on average formation yields and new fixed gas allocation. See attachments for additional information.								
ADDOVED BY		DATE			PHONE			
APPROVED BY		DATE	TITLE		I HONE			
X Kandís Roland	ł		Operations/Regulatory Tech	– Sr.	713-757-5246			
Kandis Roland	1	1/14/22						

Dean R Millure 11/15/2022

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT		Sundry Print Report 11/15/2022
Well Name: SAN JUAN 29-6 UNIT	Well Location: T29N / R6W / SEC 28 / NWNW / 36.70068 / -107.47376	County or Parish/State: RIO ARRIBA / NM
Well Number: 58A	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM03471	Unit or CA Name: SAN JUAN 29-6 UNITFR, SAN JUAN 29-6 UNITMV	Unit or CA Number: NMNM78416A, NMNM78416E
US Well Number: 3003921262	Well Status: Producing Gas Well	Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2702905

Type of Submission: Notice of Intent Date Sundry Submitted: 11/14/2022 Date proposed operation will begin: 11/01/2022

Type of Action: Commingling (Subsurface) Time Sundry Submitted: 01:18

Procedure Description: Please see attached production allocation.

NOI Attachments

Procedure Description

SJ_29_6_Unit_58A___Subtraction_20221114131805.pdf

Received by OCD: 11/15/2022 3:01:32 PM Well Name: SAN JUAN 29-6 UNIT	Well Location: T29N / R6W / SEC 28 / NWNW / 36.70068 / -107.47376	County or Parish/State: Rigge 3 of 22 ARRIBA / NM
Well Number: 58A	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM03471	Unit or CA Name: SAN JUAN 29-6 UNITFR, SAN JUAN 29-6 UNITMV	Unit or CA Number: NMNM78416A, NMNM78416E
US Well Number: 3003921262	Well Status: Producing Gas Well	Operator: HILCORP ENERGY COMPANY

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: KANDIS ROLAND

Name: HILCORP ENERGY COMPANY

Title: Operation Regulatory Tech

Street Address: 382 Road 3100

City: Farmington

State: NM

State:

Phone: (505) 599-3400

Email address: kroland@hilcorp.com

Field

Representative Name: Street Address: City: Phone: Email address:

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK BLM POC Phone: 5055647742 Disposition: Approved Signature: Kenneth Rennick BLM POC Title: Petroleum Engineer BLM POC Email Address: krennick@blm.gov

Zip:

Signed on: NOV 14, 2022 01:18 PM

Disposition Date: 11/14/2022

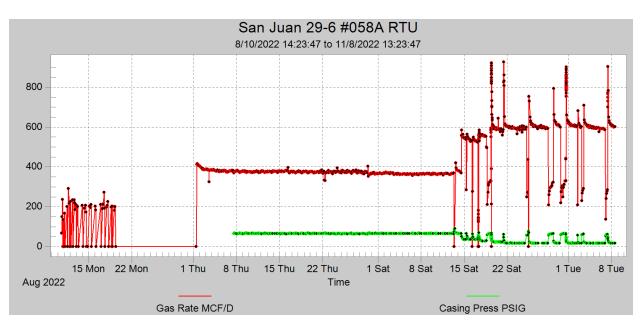
San Juan 29-6 Unit #58A

D - 28 - 29N - 06W 1150 FNL 0870 FWL

API#: 3003921262

Allocation Update – Post Compression Install

11/08/2022



- 1. Well shut in 8/19-9/1 for workover operations
- 2. Well brought online 9/2/22 without compression
- 3. Compression set 10/15/22, rate increased from 375 Mcf/d to 600 Mcf/d

Original allocation filed for rig up was filed at fixed percentage.

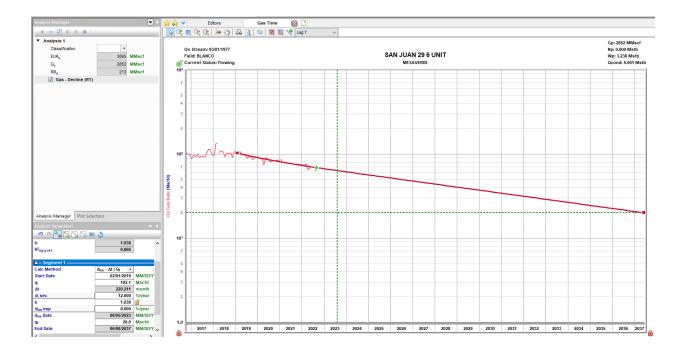
		Gas Production						
Date	Mesaverde	Fruitland Coal	Total					
Jun-21	72.5	114.4	186.9					
Jul-21	78.3	124.8	203.1					
Aug-21	76.9	123.7	200.6					
Sep-21	76.0	122. <mark>3</mark>	198.3					
Oct-21	75.2	119.8	195.0					
Nov-21	76.1	121.7	197.8					
Dec-21	75.9	115.3	191.2					
Jan-22	74.9	128.0	202.9					
Feb-22	74.2	122.1	196.3					
Mar-22	73.5	119.7	193.2					
Apr-22	76.0	124.9	200.9					
May-22	64.9	101.7	166.6					
Averages	74.5	119.9	194.4					
% of Total	38%	62%						

	0	il Productio	n
Date	Mesaverde	Fruitland C	Total
Jun-21	0.4	0.4	0.8
Jul-21	0.1	0.1	0.2
Aug-21	0.0	0.0	0.0
Sep-21	0.0	0.0	0.0
Oct-21	0.0	0.0	0.0
Nov-21	0.0	0.0	0.0
Dec-21	0.0	0.0	0.0
Jan-22	0.0	0.0	0.0
Feb-22	0.0	0.0	0.0
Mar-22	0.1	0.1	0.2
Apr-22	0.0	0.1	0.1
May-22	0.0	0.0	0.0
Averages	0.05	0.06	0.1
% of Total	46%	54%	

A commingled gas sample was collected after compression start-up. This sample, and samples collected for yearly meter calibration in June of 2022 prior to commingling are attached. The significant uplift in rate and the constituent make-up of the commingled sample show the Fruitland Coal is significantly more productive than previously anticipated. As such, we propose to update the allocation on a subtraction method with all production above and beyond the prior Mesaverde rate allocated to the Fruitland Coal. Oil production will be allocated in the same fixed percentage as previously filed. At five years allocation will switch to fixed percentage. A gas sample will be collected to verify Mesaverde contribution still aligns with assessed decline.

The flowing bottomhole pressure is unchanged in the current configuration compared to pre-workover status. Gas is being trapped in the annular space and will raise the flowing bottomhole pressure. With the wellhead compressor, we are operating with a surface pressure about 50 PSI less than the previous configuration on the Mesaverde side. However, the flowing gradient has increased due to the coal unloading fluid as well as a modest increase in frictional pressure due the total rate increase. In my experience, there is a 20-psi differential between surface pressure and casing pressure due to the frictional effects around the end of tubing with compression at this depth. When this 20 PSI differential is accounted for as well as the gradient change, the effect on flowing bottomhole pressure is marginal. With this methodology in mind, the decline method on the Mesaverde seems to be most appropriate to estimate contribution.

The gas samples do indicate the decline is reasonable. If you ignore CO2 washout in the sample and treat each hydrocarbon species as an exclusive system the weighted average estimates the Mesaverde rate between 58 and 73 Mcf/d. Our decline analysis falls within these boundaries.



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		Gas
Date	Display Name	Rate
MMM-		
YYYY	Mesaverde Forecast	Mscfd
Oct-22	SAN JUAN 29 6 UNIT 58A	70.6
Nov-22	SAN JUAN 29 6 UNIT 58A	70.1
Dec-22	SAN JUAN 29 6 UNIT 58A	69.6
Jan-23	SAN JUAN 29 6 UNIT 58A	69.1
Feb-23	SAN JUAN 29 6 UNIT 58A	68.6
Mar-23	SAN JUAN 29 6 UNIT 58A	68.1
Apr-23	SAN JUAN 29 6 UNIT 58A	67.6
May-23	SAN JUAN 29 6 UNIT 58A	67.1
Jun-23	SAN JUAN 29 6 UNIT 58A	66.7
Jul-23	SAN JUAN 29 6 UNIT 58A	66.2
Aug-23	SAN JUAN 29 6 UNIT 58A	65.7
Sep-23	SAN JUAN 29 6 UNIT 58A	65.3
Oct-23	SAN JUAN 29 6 UNIT 58A	64.8
Nov-23	SAN JUAN 29 6 UNIT 58A	64.4
Dec-23	SAN JUAN 29 6 UNIT 58A	63.9
Jan-24	SAN JUAN 29 6 UNIT 58A	63.5
Feb-24	SAN JUAN 29 6 UNIT 58A	63
Mar-24	SAN JUAN 29 6 UNIT 58A	62.6
Apr-24	SAN JUAN 29 6 UNIT 58A	62.2
May-24	SAN JUAN 29 6 UNIT 58A	61.7
Jun-24	SAN JUAN 29 6 UNIT 58A	61.3
Jul-24	SAN JUAN 29 6 UNIT 58A	60.9
Aug-24	SAN JUAN 29 6 UNIT 58A	60.5
Sep-24	SAN JUAN 29 6 UNIT 58A	60
Oct-24	SAN JUAN 29 6 UNIT 58A	59.6
Nov-24	SAN JUAN 29 6 UNIT 58A	59.2
Dec-24	SAN JUAN 29 6 UNIT 58A	58.8
Jan-25	SAN JUAN 29 6 UNIT 58A	58.4
Feb-25	SAN JUAN 29 6 UNIT 58A	58
Mar-25	SAN JUAN 29 6 UNIT 58A	57.6
Apr-25	SAN JUAN 29 6 UNIT 58A	57.2
May-25	SAN JUAN 29 6 UNIT 58A	56.8
, Jun-25	SAN JUAN 29 6 UNIT 58A	56.4
Jul-25	SAN JUAN 29 6 UNIT 58A	56
Aug-25	SAN JUAN 29 6 UNIT 58A	55.6
Sep-25	SAN JUAN 29 6 UNIT 58A	55.2

Nov-25 SAN JUAN 29 6 UNIT 58A 5 Dec-25 SAN JUAN 29 6 UNIT 58A 5 Jan-26 SAN JUAN 29 6 UNIT 58A 5 Feb-26 SAN JUAN 29 6 UNIT 58A 5 Mar-26 SAN JUAN 29 6 UNIT 58A 5 Mar-26 SAN JUAN 29 6 UNIT 58A 5 May-26 SAN JUAN 29 6 UNIT 58A 5 Jun-26 SAN JUAN 29 6 UNIT 58A 5 Jul-26 SAN JUAN 29 6 UNIT 58A 5 Aug-26 SAN JUAN 29 6 UNIT 58A 5	4.9 4.5 4.1 3.7 3.4 53 2.6
Dec-25 SAN JUAN 29 6 UNIT 58A 5 Jan-26 SAN JUAN 29 6 UNIT 58A 5 Feb-26 SAN JUAN 29 6 UNIT 58A 5 Mar-26 SAN JUAN 29 6 UNIT 58A 5 Mar-26 SAN JUAN 29 6 UNIT 58A 5 May-26 SAN JUAN 29 6 UNIT 58A 5 Jun-26 SAN JUAN 29 6 UNIT 58A 5 Jun-26 SAN JUAN 29 6 UNIT 58A 5 Jul-26 SAN JUAN 29 6 UNIT 58A 5 Aug-26 SAN JUAN 29 6 UNIT 58A 5	4.1 3.7 3.4 53
Jan-26 SAN JUAN 29 6 UNIT 58A 5 Feb-26 SAN JUAN 29 6 UNIT 58A 5 Mar-26 SAN JUAN 29 6 UNIT 58A 5 Apr-26 SAN JUAN 29 6 UNIT 58A 5 May-26 SAN JUAN 29 6 UNIT 58A 5 Jun-26 SAN JUAN 29 6 UNIT 58A 5 Jun-26 SAN JUAN 29 6 UNIT 58A 5 Jul-26 SAN JUAN 29 6 UNIT 58A 5 Aug-26 SAN JUAN 29 6 UNIT 58A 5	3.7 3.4 53
Feb-26 SAN JUAN 29 6 UNIT 58A 5 Mar-26 SAN JUAN 29 6 UNIT 58A 5 Apr-26 SAN JUAN 29 6 UNIT 58A 5 May-26 SAN JUAN 29 6 UNIT 58A 5 Jun-26 SAN JUAN 29 6 UNIT 58A 5 Jul-26 SAN JUAN 29 6 UNIT 58A 5 Aug-26 SAN JUAN 29 6 UNIT 58A 5	3.4 53
Mar-26 SAN JUAN 29 6 UNIT 58A Apr-26 SAN JUAN 29 6 UNIT 58A 5 May-26 SAN JUAN 29 6 UNIT 58A 5 Jun-26 SAN JUAN 29 6 UNIT 58A 5 Jul-26 SAN JUAN 29 6 UNIT 58A 5 Jul-26 SAN JUAN 29 6 UNIT 58A 5 Aug-26 SAN JUAN 29 6 UNIT 58A 5	53
Apr-26 SAN JUAN 29 6 UNIT 58A 5 May-26 SAN JUAN 29 6 UNIT 58A 5 Jun-26 SAN JUAN 29 6 UNIT 58A 5 Jul-26 SAN JUAN 29 6 UNIT 58A 5 Aug-26 SAN JUAN 29 6 UNIT 58A 5	
May-26 SAN JUAN 29 6 UNIT 58A 5 Jun-26 SAN JUAN 29 6 UNIT 58A 5 Jul-26 SAN JUAN 29 6 UNIT 58A 5 Aug-26 SAN JUAN 29 6 UNIT 58A 5	2.6
Jun-26 SAN JUAN 29 6 UNIT 58A 5 Jul-26 SAN JUAN 29 6 UNIT 58A 5 Aug-26 SAN JUAN 29 6 UNIT 58A 5	
Jul-26 SAN JUAN 29 6 UNIT 58A 5 Aug-26 SAN JUAN 29 6 UNIT 58A 5	2.3
Aug-26 SAN JUAN 29 6 UNIT 58A 5	1.9
	1.5
Sep-26 SAN JUAN 29 6 UNIT 58A 5	1.2
	0.8
Oct-26 SAN JUAN 29 6 UNIT 58A 5	0.5
Nov-26 SAN JUAN 29 6 UNIT 58A 5	0.1
Dec-26 SAN JUAN 29 6 UNIT 58A 4	9.8
Jan-27 SAN JUAN 29 6 UNIT 58A 4	9.4
Feb-27 SAN JUAN 29 6 UNIT 58A 4	9.1
Mar-27 SAN JUAN 29 6 UNIT 58A 4	8.8
Apr-27 SAN JUAN 29 6 UNIT 58A 4	8.4
May-27 SAN JUAN 29 6 UNIT 58A 4	8.1
Jun-27 SAN JUAN 29 6 UNIT 58A 4	7.7
Jul-27 SAN JUAN 29 6 UNIT 58A 4	7.4
Aug-27 SAN JUAN 29 6 UNIT 58A 4	7.1
Sep-27 SAN JUAN 29 6 UNIT 58A 4	6.8
Oct-27 SAN JUAN 29 6 UNIT 58A 4	6.4
Nov-27 SAN JUAN 29 6 UNIT 58A 4	
Dec-27 SAN JUAN 29 6 UNIT 58A 4	6.1

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MeterID	AssetCode	AssetName	Asset1 SampleDate	EffectiveDate	ExpirationDate	BTUWet	BTUDry	SpecificGra CO2	N2	C1	C2	C3
85-447-01	3003921262	SAN JUAN 29-6 UNIT 58A	WELL 6/14/2022 0:00	7/1/2022 0:00	12/31/2399 0:00	881	. 897	0.7125 0.143672	0.000487	0.830465	0.016635	0.006551
89-577-01	3003921262	SAN JUAN 29-6 UNIT 58A	WELL 6/14/2022 0:00	7/1/2022 0:00	12/31/2399 0:00	1163	1183	0.7006 0.022033	0.00166	0.835586	0.079488	0.033629
Commingl	ed Meter Post	Workover				847	862	0.7199 0.162093	0.000374	0.826147	0.008304	0.002145

ISOC4	NC4	ISOC5	NC5	C6_PLUS	CO2GPM	N2GPM	C1GPM	С	2GPM	C3GPM	ISOC4GPM	NC4GPM	ISOC5GPM	NC5GPM	C6_PLUSGPM	BtuDryAdj
0.001038	0.000754	0.000234	0.000081	0.000083	0		0	0	0.4459	0.1809	0.034	0.0238	0.0086	0.0029	0.0037	896.6
0.006524	0.008754	0.003385	0.002414	0.006527	0		0	0	2.1322	0.9292	0.2141	0.2768	0.1242	0.0878	0.2922	1183.2
0.000324	0.000287	0.000065	0.000034	0.000227												



2030 Afton Place Farmington, NM 87401 (505) 325-6622

Analysis No: HC20220022 Cust No: 35800-16675

		Well/Lease Information		
Customer Name:	HILCORP		Source:	METER RUN
Well Name:	SAN JUAN 29-6 #58A		Well Flowing:	Υ
County/State:			Pressure:	56 PSIG
Location:			Flow Temp:	30 DEG. F
Lease/PA/CA:			Ambient Temp:	40 DEG. F
Formation:			Flow Rate:	438 MCF/D
Cust. Stn. No.:	ELB85447		Sample Method:	Purge & Fill
	3003921262		Sample Date:	11/03/2022
			Sample Time:	9.05 AM
	AREA 10/ RUN 1003		Sampled By:	GREG VALDEZ JR
Heat Trace: Remarks:	Ν		Sampled by (CO)	: HILCORP

Analysis							
Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:		
Nitrogen	0.0374	0.0373	0.0040	0.00	0.0004		
CO2	16.2093	16.1795	2.7730	0.00	0.2463		
Methane	82.6147	82.4626	14.0370	834.41	0.4576		
Ethane	0.8304	0.8289	0.2230	14.70	0.0086		
Propane	0.2145	0.2141	0.0590	5.40	0.0033		
Iso-Butane	0.0324	0.0323	0.0110	1.05	0.0007		
N-Butane	0.0287	0.0286	0.0090	0.94	0.0006		
I-Pentane	0.0065	0.0065	0.0020	0.26	0.0002		
N-Pentane	0.0034	0.0034	0.0010	0.14	0.0001		
Hexane Plus	0.0227	0.0227	0.0100	1.20	0.0008		
Total	100.0000	99.8159	17.1290	858.08	0.7184		

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z): BTU/CU.FT IDEAL: BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1.0025 860.1 862.2	CYLINDER #: CYLINDER PRESSURE: ANALYIS DATE:	4208 51 PSIG 10/30/2022
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	847.2	ANALYIS TIME:	10:16:56 AM
DRY BTU @ 15.025:	879.5	ANALYSIS RUN BY:	RICHARD WILSON
REAL SPECIFIC GRAVITY:	0.7199		

GPM, BTU, and SPG calculations as shown above are based on current GPA constants. GPA Standard: GPA-2261 GC: Danalyzer Model 500 GC Method: C6+ Gas

Received by OCD: 11/15/2022 3:01:32 PM

HILCORP

WELL ANALYSIS COMPARISON

Lease: Stn. No.: Mtr. No.:	SAN JUAN 29-6 #58A ELB85447 3003921262
Smpl Date:	11/03/2022
Test Date:	10/30/2022
Run No:	HC20220022
Nitrogen:	0.0374
CO2:	16.2093
Methane:	82.6147
Ethane:	0.8304
Propane:	0.2145
I-Butane:	0.0324
N-Butane:	0.0287
I-Pentane:	0.0065

0.0034

0.0227

862.2

17.1290

0.7199

N-Pentane:

Hexane+:

BTU:

GPM:

SPG:

METER RUN

11/04/2022 35800-16675

Kandis Roland

McClure, Dean, EMNRD <dean.mcclure@emnrd.nm.gov></dean.mcclure@emnrd.nm.gov>		
Wednesday, November 9, 2022 4:45 PM		
Jake Perry; Kandis Roland		
Mandi Walker		
RE: [EXTERNAL] San Juan 29-6 Unit 58A - API #30-039-21262		

CAUTION: External sender. DO NOT open links or attachments from UNKNOWN senders.

Jake,

That sounds good. Please either add a brief summary of your points as laid out in the last email for why Hilcorp feels the proposed allocation is accurate, or diversly, I can attach this email chain to the sundry once submitted as well.

Dean McClure Petroleum Engineer, Oil Conservation Division New Mexico Energy, Minerals and Natural Resources Department (505) 469-8211

From: Jake Perry <Jake.Perry@hilcorp.com>
Sent: Wednesday, November 9, 2022 1:47 PM
To: McClure, Dean, EMNRD <Dean.McClure@emnrd.nm.gov>; Kandis Roland <kroland@hilcorp.com>
Cc: Mandi Walker <mwalker@hilcorp.com>
Subject: RE: [EXTERNAL] San Juan 29-6 Unit 58A - API #30-039-21262

Dean,

I can update our proposal to reflect the language about switching to fixed allocation at year 5.

I agree with your point (a) regarding the coal. With regards to the Mesaverde, the flowing bottomhole pressure is essentially unchanged as you alluded to. With the packer still in the hole, the Mesaverde is flowing with the same configuration as prior to the workover. Gas is being trapped in the annular space and will raise the flowing bottomhole pressure. With the wellhead compressor, we are operating with a surface pressure about 50 PSI less than the previous configuration on the Mesaverde side. However, the flowing gradient has increased due to the coal unloading fluid as well as a modest increase in frictional pressure due the total rate increase. In my experience, there is a 20 psi differential between surface pressure and casing pressure due to the frictional effects around the end of tubing with compression at this depth. When this 20 PSI differential is accounted for as well as the gradient change, the effect on flowing bottomhole pressure is marginal. With this methodology in mind, the decline method on the Mesaverde seems to be most appropriate to estimate contribution.

The gas samples do indicate the decline is reasonable. If you ignore CO2 as you stated and treat each hydrocarbon species as an exclusive system the weighted average estimates the Mesaverde rate between 58 and 73 Mcf/d. Our decline analysis falls within these boundaries.

We are about 93% in the Mesaverde and about 74% in the Fruitland. If our method is underestimating the Mesaverde contribution, we are the entity losing on the allocation.

Jake Perry

Prod/Ops Engineer – SJS Hilcorp Energy Co. (O) 346-237-2053 (M) 864-303-3793

From: McClure, Dean, EMNRD <<u>Dean.McClure@emnrd.nm.gov</u>>
Sent: Wednesday, November 9, 2022 2:11 PM
To: Kandis Roland <<u>kroland@hilcorp.com</u>>
Cc: Jake Perry <<u>Jake.Perry@hilcorp.com</u>>; Mandi Walker <<u>mwalker@hilcorp.com</u>>
Subject: RE: [EXTERNAL] San Juan 29-6 Unit 58A - API #30-039-21262

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Kandis,

Would the intent be to use subtraction before then switching to fixed on the 5th year? Incase it wasn't already your plan to do so, you will need to make reference to that.

Looking at this well, it seems like 3 things could be occurring: (a) the reduction in pressure is allowing a greater volume of gas to be desorbed from the coal, (b) a reduction in pressure at the well bore is allowing a higher rate of flow from the MV, and (c) the fish in the hole is restricting flow from the MC.

Thinking logically, it does seem more probably that production from the FLC may increase at a higher rate due to the reservoir mechanism likely being more responsive to a reduction in pressure than the MV. However, you would also imagine that the MV production would increase some as well (even if less so than the FLC) rather than remain constant at the previous levels unless the fish is causing enough restriction to cancel out the presumed uplift in production.

When comparing the current gas sample to the known gas from each pool, does using a decline curve based off the prior MV production seem to match what is being observed by the gas composition? Looking at your composition, I'm not entirely sure what your thoughts are in regards to methodology for comparing your gas. The influx of CO2 shifted all of your hydrocarbons down in percentage mostly out of range of your 2 comparison samples. Perhaps if the CO2 was neglected from the totals, then a comparison of the hydrocarbons could be made?

Additionally, I don't recall if this well is the one we discussed it on, but how different is the ownership between the FLC and MV in this well?

Dean McClure Petroleum Engineer, Oil Conservation Division New Mexico Energy, Minerals and Natural Resources Department (505) 469-8211

From: Kandis Roland <kroland@hilcorp.com>
Sent: Wednesday, November 9, 2022 5:40 AM
To: McClure, Dean, EMNRD <<u>Dean.McClure@emnrd.nm.gov</u>>
Cc: Jake Perry <<u>Jake.Perry@hilcorp.com</u>>; Mandi Walker <<u>mwalker@hilcorp.com</u>>; Kandis Roland
<<u>kroland@hilcorp.com</u>>
Subject: FW: [EXTERNAL] San Juan 29-6 Unit 58A - API #30-039-21262

Dean,

We have collected a gas sample on the subject well. Please see the attached documentation from Jake. I just wanted to make sure this is all of the supporting documentation that you need before I file an official allocation with BLM & OCD.

Thanks,

Kandis Roland HILCORP ENERGY San Juan East/South Regulatory 713.757.5246 <u>kroland@hilcorp.com</u>

From: Kandis Roland <kroland@hilcorp.com>
Sent: Tuesday, September 13, 2022 6:40 AM
To: McClure, Dean, EMNRD <Dean.McClure@state.nm.us>; Kenneth (Kenny) (krennick@blm.gov) <krennick@blm.gov>
Cc: Mandi Walker <mwalker@hilcorp.com>; Jake Perry <Jake.Perry@hilcorp.com>; Kandis Roland
<kroland@hilcorp.com>
Subject: RE: [EXTERNAL] San Juan 29-6 Unit 58A - API #300-39-21262

Dean,

Allocation has been approved by BLM. I have submitted this to OCD, <u>Action ID: 142601</u>. Please let me know if you need anything else.

Thanks,

Kandis Roland HILCORP ENERGY San Juan East/South Regulatory 713.757.5246 <u>kroland@hilcorp.com</u>

From: Kandis Roland <kroland@hilcorp.com>
Sent: Friday, September 9, 2022 1:10 PM
To: McClure, Dean, EMNRD <Dean.McClure@state.nm.us>; Kenneth (Kenny) (krennick@blm.gov) <krennick@blm.gov>
Cc: Mandi Walker <mwalker@hilcorp.com>; Jake Perry <Jake.Perry@hilcorp.com>; Kandis Roland
<kroland@hilcorp.com>
Subject: RE: [EXTERNAL] San Juan 29-6 Unit 58A - API #300-39-21262

Dean/Kenny,

I have submitted the allocation sundry with the requested additional information in AFMSS, <u>Sundry ID: 2691645</u>. Once approved I will send an email with the OCD submittal information.

Thanks,

Kandis Roland HILCORP ENERGY San Juan East/South Regulatory 713.757.5246 <u>kroland@hilcorp.com</u>

From: McClure, Dean, EMNRD <<u>Dean.McClure@state.nm.us</u>>
Sent: Thursday, September 1, 2022 3:35 PM
To: Jake Perry <<u>Jake.Perry@hilcorp.com</u>>
Cc: Kandis Roland <<u>kroland@hilcorp.com</u>>; Mandi Walker <<u>mwalker@hilcorp.com</u>>
Subject: RE: [EXTERNAL] San Juan 29-6 Unit 58A - API #300-39-21262

Hello Jake,

Your proposed plan seems fine; however, please submit me a sundry to be included in the admin file that includes a revised well bore diagram, a brief summary regarding there being a fish in the hole, your current conclusion that it will not affect allocation, and your proposed plan to retrieve gas samples to confirm that conclusion.

Dean McClure Petroleum Engineer, Oil Conservation Division New Mexico Energy, Minerals and Natural Resources Department (505) 469-8211

From: Jake Perry <<u>Jake.Perry@hilcorp.com</u>> Sent: Wednesday, August 31, 2022 1:27 PM To: McClure, Dean, EMNRD <<u>Dean.McClure@state.nm.us</u>> Cc: Kandis Roland <<u>kroland@hilcorp.com</u>>; Mandi Walker <<u>mwalker@hilcorp.com</u>> Subject: FW: [EXTERNAL] San Juan 29-6 Unit 58A - API #300-39-21262

Afternoon Dean,

Please see below regarding the commingling of this well. We have been unable to recover the packer and have received approval as noted below to produce the well as detailed. At this time, I have no reason to believe our allocation as provided on the DHC is not applicable. We plan to get the well on production and install a compressor to bring the flowing wellhead pressure to approximately 10 PSIG. This will be lower than the pressure prior to rig up. The Mesaverde is still flowing as confirmed from our troubleshooting efforts. Once online we will need to collect gas samples for our gathering allocation and can use this data to confirm the uplift by zone due to the differences in gas makeup between the Fruitland and Mesaverde. If we see something that indicates an allocation variance, we can follow-up and provide a supported allocation change. Please let me know if you have any issue with this plan forward.

Jake Perry Prod/Ops Engineer – SJS Hilcorp Energy Co. (O) 346-237-2053 (M) 864-303-3793 From: Kuehling, Monica, EMNRD <<u>monica.kuehling@state.nm.us</u>>
Sent: Wednesday, August 31, 2022 2:16 PM
To: Jake Perry <<u>Jake.Perry@hilcorp.com</u>>; Rennick, Kenneth G <<u>krennick@blm.gov</u>>
Cc: Farmington Regulatory Techs <<u>FarmingtonRegulatoryTechs@hilcorp.com</u>>; Daniel Hurd <<u>dhurd@hilcorp.com</u>>
Subject: RE: [EXTERNAL] San Juan 29-6 Unit 58A - API #300-39-21262

Jake

It is ok with us to produce the well with the fish in the hole. However, you will need to get with Dean McClure due to the downhole conditions being abnormal and make sure the proper allocations are used.

Thank you

Monica Kuehling Compliance Officer Supervisor Deputy Oil and Gas Inspector New Mexico Oil Conservation Division North District Office Phone: 505-334-6178 ext. 123 Cell Phone: 505-320-0243

From: Jake Perry <<u>Jake.Perry@hilcorp.com</u>>
Sent: Wednesday, August 31, 2022 1:03 PM
To: Kuehling, Monica, EMNRD <<u>monica.kuehling@state.nm.us</u>>; Rennick, Kenneth G <<u>krennick@blm.gov</u>>
Cc: Farmington Regulatory Techs <<u>FarmingtonRegulatoryTechs@hilcorp.com</u>>; Daniel Hurd <<u>dhurd@hilcorp.com</u>>
Subject: RE: [EXTERNAL] San Juan 29-6 Unit 58A - API #300-39-21262

Yes, ma'am those footages are correct.

We have verified flow a couple of ways. The simplest is from the downhole camera. The video clearly shows the flow up the tubing fish coming from the Mesaverde.

This well was not drilled past the Mesaverde. It is TD'd above the Mancos top.

The bradenhead has been checked every day and has no pressure.

From: Kuehling, Monica, EMNRD <<u>monica.kuehling@state.nm.us</u>
Sent: Wednesday, August 31, 2022 1:53 PM
To: Jake Perry <<u>Jake.Perry@hilcorp.com</u>>; Rennick, Kenneth G <<u>krennick@blm.gov</u>>
Cc: Farmington Regulatory Techs <<u>FarmingtonRegulatoryTechs@hilcorp.com</u>>; Daniel Hurd <<u>dhurd@hilcorp.com</u>>
Subject: RE: [EXTERNAL] San Juan 29-6 Unit 58A - API #300-39-21262

Jake

There is a fish in the hole from 3351 to 5454?

And you know that there is flow from the MV? How? – how do you know at this point and is it flowing through the tubing or coming around the packer or both and is there damage to the mancos – your schematic shows pt lookout at 5351 where is the mancos

What is the bh pressure

Monica

From: Jake Perry <<u>Jake.Perry@hilcorp.com</u>>

Sent: Wednesday, August 31, 2022 11:33 AM

To: Kuehling, Monica, EMNRD <<u>monica.kuehling@state.nm.us</u>>; Rennick, Kenneth G <<u>krennick@blm.gov</u>>
 Cc: Farmington Regulatory Techs <<u>FarmingtonRegulatoryTechs@hilcorp.com</u>>; Daniel Hurd <<u>dhurd@hilcorp.com</u>>
 Subject: [EXTERNAL] San Juan 29-6 Unit 58A - API #300-39-21262

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Monica/Kenny,

As discussed over the phone, we have run into issues recovering this packer and tubing. I have attached our original NOI to commingle for reference and a diagram of current well geometry as well as new proposal. At this point we are requesting to leave the fish in the hole and land tubing at approximately 3100' to produce the Fruitland and Mesaverde. We have previously received approval to downhole commingle this well per order DHC-5218 dated August 8,2022.

8/19: MIRU, NDWH, NUBOP

8/22: POOH with short string and release packer and attempt to pull long string, only got 11' of movement 8/23: Work tubing and circulate, make additional 1' of pickup

8/24: TIH with Eline jet cutter and cut tubing at 3335', recover pipe to 3335', PU overshot and RIH

8/25: Dress fish and latch, jar fish with 15' of movement up and down, release off overshot, PU wash over shoe, wash to 3347' before stalling and hitting obstruction

8/26: POOH with wash over shoe, shoe parted and left 2' section in the hole, RIH with overshot to latch tubing,

recovered 12.7' cut joint with pin end (no collar on bottom), run overshot to latch tubing, no success

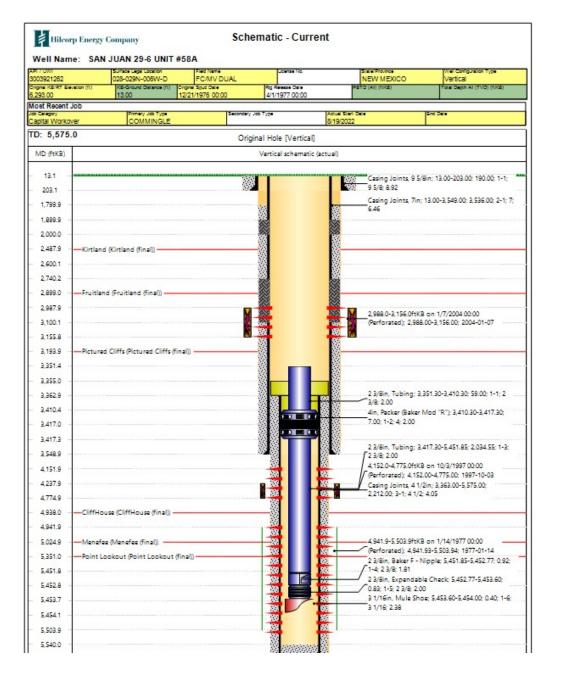
8/27: Pull and run overshot and attempt to latch shoe remnant, no success, roundtrip and run lead impression block, inconclusive

8/28: Rig up E-line and run camera, camera showed shoe had rolled tubing top, no ability to latch, deviation and right at casing connection making wash over unsuccessful

8/29: Ran 6.25" skirted junk mill, washed over fish top and milled to 3351', saw frac sand coming back in returns 8/30: Ran overshot and latched tubing body on fish, ran E-line to free point and showed pipe stuck right below fish top (42% free) and 100% stuck 18' above packer. Ran E-line chemical cutter and attempt to cut at 3411', believe cutter failed, POOH and ran jet cutter to same depth and attempt to make cut

8/31: Unable to pickup and recover 2 jts of pipe pulling 40K over string weight while pumping water

Jake Perry Prod/Ops Engineer – SJS Hilcorp Energy Co. (O) 346-237-2053 (M) 864-303-3793



Received by OCD: 11/15/2022 3:01:32 PM

3003921262	028-029N-005W-D	Field Name FC/MV DUAL	Joanse No.	NEW	MEXICO	Wel Configuration Type Vertical
original K&IRT Elevat	ion (%) KE-Ground Datiance (%)	12/21/1975 00:00	Rg Release Date 4/1/1977 00:00	PETO (AI) (Total Depth AI (TVD) (NK2)
Aost Recent Jo		12/21/19/0 00:00	2/1/19/7 00:00			
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		Ong	ginal Hole [Vertical]			
MD (ftKB)			Vertical schematic (actual)		
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1,899.9						
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2.600.1						
2.740.2						
2,899.0	-Fruitland (Fruitland (final))					
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3,417.0					(1-2, 4, 2.00	
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5,351.0	-Point Lookout (Point Lookout (F	ina())				5,503.94; 1977-01-14 le: 5,451.85-5,452.77; 0.92;
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5,452.8					8in, Expendable Ch : 1-5: 2 3/8: 2.00	reck; 5,452.77-5,453.60;
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District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

COMMENTS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	159060
	Action Type:
	[IM-SD] Admin Order Support Doc (ENG) (IM-AAO)
COMMENTS	

COMMENTS

Created By	Comment	Comment Date
dmcclure	Approved under Action ID: 158728	11/15/2022

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Action 159060

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