

GW - 28

**COVID-19
PANDEMIC**

2020

From: [Combs, Robert](#)
To: [Chavez, Carl J. EMNRD](#); [Denton, Scott](#); [Wade, Gabriel. EMNRD](#); [Cobrain, Dave. NMENV](#); [Tsinnajinnie, Leona. NMENV](#)
Cc: [Leik, Jason](#); [Griswold, Jim. EMNRD](#)
Subject: [EXT] RE: HFNR Semi-annual GW Monitoring Delay Request
Date: Friday, May 22, 2020 11:57:56 AM
Attachments: [HFNR Artesia Water Level Data April20.pdf](#)

Leona and Carl,

HollyFrontier Navajo Refining (HFNR) conducts groundwater monitoring on a semi-annual basis in accordance with the Facility-Wide Groundwater Monitoring Work Plan (FWGMWP) for the Artesia refinery (required by RCRA Permit No. NMD048918817 and OCD Discharge Permit GW-028). The first monitoring event for 2020 was scheduled for the week of April 13, 2020, but was postponed due to a public health emergency and travel restrictions associated with COVID-19. HFNR requested a 60-day delay of groundwater monitoring activities, as described in an email notification on April 8, 2020, and approved by the New Mexico Oil Conservation Division (OCD) and New Mexico Environment Department (NMED). We are going to proceed with GW sampling, we will be following protocols consistent with State and HollyFrontier procedures and are hereby providing 14 day notification prior to the sampling event.

The NMED requested the collection of water levels at wells in the general vicinity of the proposed Pilot Test locations. Per this request, 35 select wells, as shown on the attached table, were gauged to measure depth to water and phase-separated hydrocarbons (PSH), if present. The table shows gauging data from the two semi-annual events in April and October 2019 and data collected from select wells in on April 14, 2020.

Wells were gauged to determine the groundwater elevation, the presence or absence of PSH, and apparent PSH thickness using a decontaminated oil-water interface probe. All measurements were recorded to the nearest 0.01-foot from the surveyed datum marking on each well casing. If the survey datum mark was not visible, measurements were obtained from the northern side of each well riser. Measurements were recorded on the field data sheets for each event. For wells with PSH present, the groundwater elevation was corrected for the presence of PSH (with a specific gravity of 0.8).

Groundwater elevations fluctuate seasonally and over time at the refinery. PSH thicknesses generally appear to be inversely affected by fluctuations in groundwater elevations (i.e., PSH thickness generally increases with decreasing groundwater elevation). The results of the gauging indicate that groundwater elevations, and PSH presence and thicknesses are relatively consistent with historical data, as described below:

- PSH was observed in 10 wells during the April 2020 partial gauging event. PSH has historically been observed in each of these wells. There were no new wells with PSH in April 2020.
- Groundwater elevations for wells gauged during the April 2020 partial gauging event were compared to historical elevations. All elevations were generally consistent with historical data. Groundwater elevation fluctuations are common throughout the refinery, particularly in monitoring wells located near recovery wells and in wells near areas where fluids have been historically land-applied.

The first semi-annual groundwater monitoring event has been tentatively rescheduled for the week of June 15, 2020, barring addition restrictions from the New Mexico Department of Health (NMDOH). These wells will be gauged again as part of the semi-annual groundwater monitoring event and results included on applicable reports to the NMED and OCD.

If you have any questions or would like to discuss, please let us know.

Thanks,
Robert

From: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Sent: Wednesday, April 8, 2020 10:42 AM
To: Denton, Scott <Scott.Denton@HollyFrontier.com>; Wade, Gabriel, EMNRD <Gabriel.Wade@state.nm.us>; Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>; Tsinnajinnie, Leona, NMENV <Leona.Tsinnajinnie@state.nm.us>
Cc: Combs, Robert <Robert.Combs@HollyFrontier.com>; Leik, Jason <Jason.Leik@HollyFrontier.com>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>
Subject: [Warning Possible Business Email Compromise]RE: HFNR Semi-annual GW Monitoring Delay Request

Scott, et al.:

Approved.

Thank you.

Mr. Carl J. Chavez, CHMM (#13099)
New Mexico Oil Conservation Division (Albuquerque Office)
Energy Minerals and Natural Resources Department
5200 Oakland Avenue, NE
Albuquerque, New Mexico 87113
Ph. (505) 660-7923
E-mail: CarlJ.Chavez@state.nm.us

“Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?” (To see how, go to: <http://www.emnrd.state.nm.us/OCD> and see “Publications”)

From: Denton, Scott <Scott.Denton@HollyFrontier.com>
Sent: Tuesday, April 7, 2020 4:57 PM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>; Wade, Gabriel, EMNRD <Gabriel.Wade@state.nm.us>; Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>; Tsinnajinnie, Leona, NMENV <Leona.Tsinnajinnie@state.nm.us>
Cc: Denton, Scott <Scott.Denton@HollyFrontier.com>; Combs, Robert <Robert.Combs@HollyFrontier.com>; Leik, Jason <Jason.Leik@HollyFrontier.com>

Subject: [EXT] HFNR Semi-annual GW Monitoring Delay Request

Mr. Carl Chavez
Mr. Gabriel Wade

Mr. Dave Cobrain
Ms. Leona Tsinnajinnie

Request for 60 day delay of Groundwater Sampling at Navajo and Lovington Refineries.

HollyFrontier Navajo Refining (HFNR) conducts groundwater sampling on a semi-annual basis in accordance with the Facility-Wide Groundwater Monitoring Work Plan (FWGMWP) for the Artesia refinery (required by RCRA Permit No. NMD048918817 and OCD Discharge Permit GW-028), and OCD AP-110 for the Lovington refinery. The first sampling event for 2020 is currently scheduled for the week of April 13, 2020 for both facilities.

On March 11, 2020, Governor Michelle Lujan Grisham declared a public health emergency, and through the Department of Health Services has issued several subsequent Public Health Orders. On April 6, 2020, the public health emergency declaration was renewed and extended through April 30, 2020. A Public Health Order issued 3-23-2020 and amended on April 6, 2020 directs all non-essential businesses in New Mexico to close, and for essential businesses in New Mexico to minimize operations and staff to the greatest extent practical. Since this declaration, The Governor has also issued travel restrictions related to air travel for travelers coming to New Mexico from out of state, requiring a 14 day waiting period, and restrictions related to lodging (hotels limited to 25% occupancy beginning April 7). The travel restriction orders do not currently prevent HFNR's contractor from traveling to the site by vehicles(although guidelines suggest that they should self-isolate for 14 days upon entry to New Mexico), but the lodging restrictions may have an impact on the availability of accommodations. It is also possible that additional travel restrictions will be made which would impact our contractor's ability to reach the facility or to return home after the sampling is complete.

Refinery operations are considered to be an essential business as defined in the current Public Health Order. However, the subcontractor that normally performs sampling at the Artesia and Lovington refineries is based in Houston, Texas, and would be sending a team of 9 members to perform sampling at Artesia and Lovington over a 5 day period. HFNR has been weighing manpower options for an acceptable approach to comply with the health orders while meeting the requirements of our RCRA and Discharge Permits. In this evaluation, local contractors and/or HFNR employees would be trained to perform the sampling. HFNR is concerned about the quality of data that would be collected under this approach and how comparable it would be to other monitoring events.

Based on review of historical data, HFNR believes a representative sampling event could be performed by our Houston-based contractor with a 60 day delay without causing any significant data quality impact due to irrigation activities in the region. Any anomalous data obtained or other exceptions to the work plan would be discussed in the Annual Groundwater Monitoring report, as prescribed in the FWGMWP.

In order to minimize threat to worker health and minimize the potential spread of COVID-19 in accordance with New Mexico directives, HFNR hereby requests postponement of the semi-annual sampling events at Artesia and Lovington for a period of 60 days. HFNR will review the circumstances after 45 days, and make a determination then if the sampling can be performed or should be cancelled based on State of New Mexico directives, risk to workers, and hydrogeologic conditions.

In the interim, HFNR will collect groundwater elevation data from the east side of the Artesia refinery, and will continue to operate the groundwater and LNAPL recovery systems using local personnel.

Please don't hesitate to contact me if you have any questions related to this request.

I hope you are all Safe and Healthy!

Regards,

SMD

Scott M. Denton
Environmental Manager

HollyFrontier Navajo Refining LLC
P.O. Box 159
Artesia, NM 88211-0159
575-746-5487 (o)
970-581-7268 (c)

CONFIDENTIALITY NOTICE: This e-mail, and any attachments, may contain information that is privileged and confidential. If you received this message in error, please advise the sender immediately by reply e-mail and do not retain any paper or electronic copies of this message or any attachments. Unless expressly stated, nothing contained in this message should be construed as a digital or electronic signature or a commitment to a binding agreement.

CONFIDENTIALITY NOTICE: This e-mail, and any attachments, may contain information that is privileged and confidential. If you received this message in error, please advise the sender immediately by reply e-mail and do not retain any paper or electronic copies of this message or any attachments. Unless expressly stated, nothing contained in this message should be construed as a digital or electronic signature or a commitment to a binding agreement.

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
Cross-Gradient	KWB-13	Shallow	669077.00	524892.42	3366.02	3365.67	Unknown	Unknown	04/02/19	--	27.54	3,338.13	--
									10/22/19	--	23.36	3,342.31	--
									04/14/20	--	--	--	--
	NP-5	Shallow	675512.24	524698.19	3,346.31	3,349.29	3,336.06	10.25 to 20	04/02/19	--	13.21	3,336.08	--
									10/22/19	--	14.85	3,334.44	--
									04/14/20	--	--	--	--
Evaporation Ponds	MW-136	Shallow	675343.45	522975.40	3,358.62	3,360.83	3,348.62	10 to 25	04/02/19	--	11.36	3,349.47	--
									10/22/19	--	14.60	3,346.23	--
									04/14/20	--	--	--	--
	MW-1R	Shallow	675135.17	538636.78	3,310.49	3,314.20	3,302.49	8 to 23	04/02/19	--	11.08	3,303.12	--
									10/22/19	--	10.04	3,304.16	--
									04/14/20	--	--	--	--
	MW-2A	Shallow	675979.09	540803.91	3,310.55	3,312.97	Unknown	Unknown	04/02/19	--	10.73	3,302.24	--
									10/22/19	--	10.08	3,302.89	--
									04/14/20	--	--	--	--
	MW-2B	Valley Fill	675969.73	540801.44	3,309.94	3,312.49	3,271.44	38.5 to 48	04/02/19	--	10.99	3,301.50	--
									10/22/19	--	10.22	3,302.27	--
									04/14/20	--	--	--	--
	MW-3	Shallow	674443.34	540503.24	3,309.20	3,312.26	Unknown	Unknown	04/02/19	--	11.35	3,300.91	--
									10/22/19	--	10.55	3,301.71	--
									04/14/20	--	--	--	--
	MW-4A	Shallow	674083.00	540529.44	3,308.63	3,312.20	Unknown	Unknown	04/02/19	--	11.42	3,300.78	--
									10/22/19	--	10.77	3,301.43	--
									04/14/20	--	--	--	--
	MW-4B	Valley Fill	674089.71	540541.34	3,308.73	3,312.01	3,248.48	60.25 to 70	04/02/19	--	11.19	3,300.82	--
									10/22/19	--	10.44	3,301.57	--
									04/14/20	--	--	--	--
	MW-5A	Shallow	674272.84	541759.78	3,306.59	3,308.62	Unknown	Unknown	04/02/19	--	8.34	3,300.28	--
									10/22/19	--	6.23	3,302.39	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
Evaporation Ponds	MW-5B	Valley Fill	674272.33	541739.12	3,306.71	3,308.95	3,265.21	41.5 to 50.5	04/02/19	--	8.60	3,300.35	--
									10/22/19	--	7.58	3,301.37	--
									04/14/20	--	--	--	--
	MW-5C	Valley Fill	674279.57	541728.80	3,306.55	3,309.28	3,247.30	59.25 to 68.75	04/02/19	--	7.99	3,301.29	--
									10/22/19	--	7.82	3,301.46	--
									04/14/20	--	--	--	--
	MW-6A	Shallow	674427.07	539833.47	3,310.40	3,313.46	Unknown	Unknown	04/02/19	--	12.58	3,300.88	--
									10/22/19	--	11.88	3,301.58	--
									04/14/20	--	--	--	--
	MW-6B	Valley Fill	674418.57	539834.04	3,310.09	3,313.35	3,270.59	39.5 to 49	04/02/19	--	12.48	3,300.87	--
									10/22/19	--	11.77	3,301.58	--
									04/14/20	--	--	--	--
	MW-7A	Shallow	674447.64	542716.01	3,304.61	3,308.01	Unknown	Unknown	04/02/19	--	9.26	3,298.75	--
									10/22/19	--	7.83	3,300.18	--
									04/14/20	--	--	--	--
	MW-7B	Valley Fill	674455.63	542715.61	3,306.05	3,307.87	3,266.55	39.5 to 49	04/02/19	--	9.05	3,298.82	--
									10/22/19	--	7.60	3,300.27	--
									04/14/20	--	--	--	--
	MW-10	Shallow	672121.15	541540.05	3,304.12	3,304.76	3,304.12	0 to 19.4	04/02/19	--	5.42	3,299.34	--
									10/22/19	--	4.46	3,300.30	--
									04/14/20	--	--	--	--
	MW-11A	Shallow	677317.73	543675.36	3,308.42	3,310.76	3,302.92	5.5 to 20	04/02/19	--	9.67	3,301.09	--
									10/22/19	--	8.33	3,302.43	--
									04/14/20	--	--	--	--
	MW-11B	Valley Fill	677305.72	543685.50	3,308.34	3,310.76	3,272.84	35.5 to 45	04/02/19	--	9.63	3,301.13	--
									10/22/19	--	8.32	3,302.44	--
									04/14/20	--	--	--	--
	MW-12	Shallow	676952.63	541505.50	3,310.37	3,312.73	3,303.87	6.5 to 16	04/02/19	--	10.67	3,302.06	--
									10/22/19	--	9.94	3,302.79	--
									04/14/20	--	--	--	--
	MW-13	Shallow	674951.80	539762.62	3,311.95	3,314.24	3,302.45	9.5 to 19	04/02/19	--	12.60	3,301.64	--
									10/22/19	--	11.62	3,302.62	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
Evaporation Ponds	MW-14	Shallow	676122.48	543280.49	3,309.44	3,311.84	3,303.94	5.5 to 20	04/02/19	--	>11.81 ⁽⁴⁾	--	--
									10/22/19	--	10.98	3,300.86	--
									04/14/20	--	--	--	--
	MW-15	Shallow	674731.39	539003.75	3,310.97	3,313.72	3,301.97	9 to 19	04/02/19	--	12.09	3,301.63	--
									10/22/19	--	11.34	3,302.38	--
									04/14/20	--	--	--	--
	MW-18A	Shallow	672548.16	543447.78	3,306.33	3,308.58	3,296.33	10 to 20	04/02/19	--	10.29	3,298.29	--
									10/22/19	--	9.14	3,299.44	--
									04/14/20	--	--	--	--
	MW-18B	Valley Fill	672557.96	543458.22	3,306.23	3,308.74	3,269.23	37 to 47	04/02/19	--	10.28	3,298.46	--
									10/22/19	--	9.12	3,299.62	--
									04/14/20	--	--	--	--
	MW-18T	Valley Fill	672559.79	543449.75	3,306.30	3,308.55	3,269.30	37 to 47	04/02/19	--	10.37	3,298.18	--
									10/22/19	--	9.22	3,299.33	--
									04/14/20	--	--	--	--
	MW-22A	Shallow	672866.82	541801.63	3,305.24	3,307.62	3,299.74	5.5 to 20.5	04/02/19	--	7.96	3,299.66	--
									10/22/19	--	6.94	3,300.68	--
									04/14/20	--	--	--	--
	MW-22B	Valley Fill	672866.58	541786.97	3,305.08	3,307.63	3,262.78	42.3 to 52	04/02/19	--	7.83	3,299.80	--
									10/22/19	--	6.91	3,300.72	--
									04/14/20	--	--	--	--
	MW-24	Shallow	676498.23	544101.56	3,310.33	3,312.85	3,295.33	15 to 20	04/02/19	--	12.53	3,300.32	--
									10/22/19	--	11.50	3,301.35	--
									04/14/20	--	--	--	--
	MW-69	Shallow	675962.29	540401.29	3,311.40	3,313.86	3,306.40	5 to 20	04/02/19	--	11.39	3,302.47	--
									10/22/19	--	10.52	3,303.34	--
									04/14/20	--	--	--	--
	MW-70	Shallow	670892.66	542787.60	3,303.84	3,306.30	3,298.84	5 to 20	04/02/19	--	8.13	3,298.17	--
									10/22/19	--	7.30	3,299.00	--
									04/14/20	--	--	--	--
	MW-72	Shallow	676691.27	542662.31	3,306.40	3,308.45	3,304.40	2 to 12	04/02/19	--	7.34	3,301.11	--
									10/22/19	--	6.73	3,301.72	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
Evaporation Ponds	MW-73	Shallow	675910.20	542130.56	3,308.02	3,310.18	3,306.02	2 to 17	04/02/19	--	8.92	3,301.26	--
									10/22/19	--	9.87	3,300.31	--
									04/14/20	--	--	--	--
	MW-74	Shallow	675059.14	541546.30	3,307.78	3,310.03	3,305.78	2 to 17	04/02/19	--	9.13	3,300.90	--
									10/22/19	--	8.52	3,301.51	--
									04/14/20	--	--	--	--
	MW-75	Shallow	674622.31	541132.78	3,307.80	3,310.21	3,304.80	3 to 18	04/02/19	--	9.43	3,300.78	--
									10/22/19	--	8.59	3,301.62	--
									04/14/20	--	--	--	--
	MW-76	Shallow	674482.47	541053.83	3,309.70	3,311.84	3,306.70	3 to 18	04/02/19	--	10.97	3,300.87	--
									10/22/19	--	10.19	3,301.65	--
									04/14/20	--	--	--	--
	MW-77	Shallow	674529.89	541104.86	3,307.97	3,310.07	3,304.97	3 to 18	04/02/19	--	9.23	3,300.84	--
									10/22/19	--	8.36	3,301.71	--
									04/14/20	--	--	--	--
	MW-78	Shallow	674529.23	541073.45	3,307.94	3,310.14	3,305.94	2 to 17	04/02/19	--	9.25	3,300.89	--
									10/22/19	--	8.21	3,301.93	--
									04/14/20	--	--	--	--
	MW-79	Shallow	675349.67	540906.08	3,309.08	3,311.43	3,307.08	2 to 17	04/02/19	--	10.11	3,301.32	--
									10/22/19	--	9.71	3,301.72	--
									04/14/20	--	--	--	--
	MW-80	Shallow	675371.74	540646.46	3,310.27	3,310.79	3,308.27	2 to 17	04/02/19	--	9.05	3,301.74	--
									10/22/19	--	8.40	3,302.39	--
									04/14/20	--	--	--	--
	MW-81	Shallow	675252.80	540544.47	3,310.19	3,312.34	3,308.19	2 to 17	04/02/19	--	11.02	3,301.32	--
									10/22/19	--	10.22	3,302.12	--
									04/14/20	--	--	--	--
	MW-82	Shallow	675035.42	540806.88	3,308.64	3,310.75	3,306.64	2 to 17	04/02/19	--	9.66	3,301.09	--
									10/22/19	--	8.93	3,301.82	--
									04/14/20	--	--	--	--
	MW-83	Shallow	674524.97	540832.80	3,307.93	3,310.19	3,305.93	2 to 17	04/02/19	--	9.23	3,300.96	--
									10/22/19	--	8.47	3,301.72	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
Evaporation Ponds	MW-84	Shallow	674798.43	540109.13	3,309.83	3,311.59	3,307.83	2 to 17	04/02/19	--	9.93	3,301.66	--
									10/22/19	--	8.70	3,302.89	--
									04/14/20	--	--	--	--
	MW-85	Shallow	674566.12	539805.49	3,308.99	3,311.09	3,305.99	3 to 18	04/02/19	10.09	10.29	3,300.96	0.20
									10/22/19	9.35	9.65	3,301.68	0.30
									04/14/20	--	--	--	--
	MW-86	Shallow	674645.96	539671.17	3,308.98	3,311.06	3,306.98	2 to 17	04/02/19	9.90	9.93	3,301.15	0.03
									10/22/19	9.19	9.96	3,301.72	0.77
									04/14/20	--	--	--	--
	MW-87	Shallow	673379.98	543280.45	3,305.42	3,307.64	3,303.42	2 to 17	04/02/19	--	8.58	3,299.06	--
									10/22/19	--	6.93	3,300.71	--
									04/14/20	--	--	--	--
	MW-88	Shallow	672899.14	540832.09	3,306.43	3,308.68	3,303.43	3 to 18	04/02/19	--	8.68	3,300.00	--
									10/22/19	--	7.97	3,300.71	--
									04/14/20	--	--	--	--
	MW-120	Shallow	674678.95	539555.77	3,310.66	3,313.55	3,300.66	10 to 25	04/02/19	--	12.58	3,300.97	--
									10/22/19	--	11.80	3,301.75	--
									04/14/20	--	--	--	--
	MW-121	Shallow	674851.38	539923.70	3,311.77	3,314.68	3,301.77	10 to 25	04/02/19	--	12.93	3,301.75	--
									10/22/19	--	11.59	3,303.09	--
									04/14/20	--	--	--	--
	MW-122	Shallow	675231.06	540401.60	3,308.78	3,311.69	3,298.78	10 to 20	04/02/19	--	10.61	3,301.08	--
									10/22/19	--	9.84	3,301.85	--
									04/14/20	--	--	--	--
	MW-123	Shallow	671352.15	541523.94	3,302.78	3,303.98	3,292.78	10 to 25	04/02/19	--	5.78	3,298.20	--
									10/22/19	--	5.04	3,298.94	--
									04/14/20	--	--	--	--
	MW-124	Shallow	669844.77	542735.51	3,302.99	3,305.84	3,297.99	5 to 20	04/02/19	--	8.68	3,297.16	--
									10/22/19	--	7.92	3,297.92	--
									04/14/20	--	--	--	--
	OCD-1R	Shallow	676741.31	541568.00	3,310.69	3,314.27	Unknown	Unknown	04/02/19	--	12.11	3,302.16	--
									10/22/19	--	11.44	3,302.83	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
Evaporation Ponds	OCD-2A	Shallow	677036.12	542157.14	3,310.83	3,314.16	3,302.33	8.5 to 23.5	04/02/19	--	12.37	3,301.79	--
									10/22/19	--	11.60	3,302.56	--
									04/14/20	--	--	--	--
	OCD-2B	Valley Fill	677034.65	542167.57	3,310.66	3,313.07	3,272.16	38.5 to 48	04/02/19	--	11.39	3,301.68	--
									10/22/19	--	10.68	3,302.39	--
									04/14/20	--	--	--	--
	OCD-3	Shallow	677516.31	543024.47	3,310.88	3,314.29	3,304.38	6.5 to 21.5	04/02/19	--	12.69	3,301.60	--
									10/22/19	--	11.79	3,302.50	--
									04/14/20	--	--	--	--
	OCD-4	Shallow	678099.52	543893.55	3,310.10	3,313.70	3,303.60	6.5 to 21.5	04/02/19	--	12.21	3,301.49	--
									10/22/19	--	11.35	3,302.35	--
									04/14/20	--	--	--	--
	OCD-5	Shallow	677081.54	544295.35	3,308.71	3,311.34	Unknown	Unknown	04/02/19	--	10.36	3,300.98	--
									10/22/19	--	9.36	3,301.98	--
									04/14/20	--	--	--	--
	OCD-6	Shallow	676538.82	543540.03	3,307.20	3,311.36	3,299.20	8 to 23	04/02/19	--	10.92	3,300.44	--
									10/22/19	--	9.58	3,301.78	--
									04/14/20	--	--	--	--
	OCD-7AR	Shallow	676169.74	543071.88	3,308.86	3,310.03	3,303.36	5.5 to 19.5	04/02/19	--	9.80	3,300.23	--
									10/22/19	--	9.17	3,300.86	--
									10/22/19	--	9.17	3,300.86	--
	OCD-7B	Valley Fill	676157.36	543081.99	3,307.57	3,310.26	3,264.07	43.5 to 52.5	04/02/19	--	9.68	3,300.58	--
									10/22/19	--	8.92	3,301.34	--
									04/14/20	--	--	--	--
	OCD-7C	Valley Fill	676155.95	543069.21	3,307.74	3,310.10	3,247.49	60.25 to 69.75	04/02/19	--	9.19	3,300.91	--
									10/22/19	--	8.12	3,301.98	--
									04/14/20	--	--	--	--
	OCD-8A	Shallow	674976.41	543376.95	3,306.26	3,308.79	3,303.26	3 to 18	04/02/19	--	8.81	3,299.98	--
									10/22/19	--	6.55	3,302.24	--
									04/14/20	--	--	--	--
	OCD-8B	Valley Fill	674992.24	543375.06	3,306.11	3,309.19	3,262.61	43.5 to 53	04/02/19	--	8.97	3,300.22	--
									10/22/19	--	7.68	3,301.51	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
Field East of Refinery	KWB-1A	Shallow	672969.12	526181.36	3,351.25	3,353.46	3,333.25	18 to 32	04/02/19	--	15.26	3,338.20	--
									10/22/19	--	15.32	3,338.14	--
									04/14/20	--	--	--	--
	KWB-1B	Shallow	672968.90	526191.02	3,351.14	3,352.83	3,333.14	18 to 32	04/02/19	--	16.96	3,335.87	--
									10/22/19	--	16.99	3,335.84	--
									04/14/20	--	--	--	--
	KWB-1C	Valley Fill	672968.22	526202.95	3,351.18	3,351.38	3,320.68	30.5 to 49.5	04/02/19	--	17.55	3,333.83	--
									10/22/19	--	17.61	3,333.77	--
									04/14/20	--	--	--	--
	KWB-7	Shallow	671266.72	529055.47	3,343.00	3,346.16	3,325.00	18 to 32	04/02/19	25.18	25.22	3,320.97	0.04
									10/22/19	17.44	17.47	3,328.71	0.03
									04/14/20	--	--	--	--
	KWB-8	Shallow	671000.57	527874.87	3,347.90	3,350.41	3,332.90	15 to 34	04/02/19	25.51	28.72	3,324.26	3.21
									10/22/19	16.68	16.72	3,333.72	0.04
									04/14/20	25.35	28.08	3,324.51	2.73
	KWB-10R	Shallow	671756.34	526206.06	3,351.23	3,350.97	3,342.23	9 to 29	04/02/19	17.99	18.45	3,332.89	0.46
									10/22/19	16.51	18.44	3,334.07	1.93
									04/14/20	18.57	18.57	3,332.40	0.00
	KWB-11A	Shallow	670643.67	529043.46	3,346.13	3,348.72	3,316.13	30 to 39.5	04/02/19	26.22	26.23	3,322.50	0.01
									10/22/19	17.00	17.03	3,331.71	0.03
									04/14/20	--	--	--	--
	KWB-11B	Valley Fill	670653.84	529044.06	3,345.91	3,348.03	3,295.91	50 to 69.5	04/02/19	--	26.97	3,321.06	--
									10/22/19	--	17.77	3,330.26	--
									04/14/20	--	--	--	--
	KWB-12A	Shallow	669074.44	527590.88	3,352.01	3,351.81	3,336.51	15.5 to 24.5	04/02/19	--	Dry	--	--
									10/23/19	--	18.83	3,332.98	--
									04/14/20	--	--	--	--
	KWB-12B	Valley Fill	669064.18	527590.12	3,351.84	3,351.63	3,326.34	25.5 to 39.5	04/02/19	--	27.89	3,323.74	--
									10/23/19	--	18.63	3,333.00	--
									04/14/20	--	--	--	--
	KWB-P4	Shallow	670970.10	537416.92	3,305.76	3,305.39	Unknown	Unknown	04/02/19	--	5.56	3,299.83	--
									10/22/19	--	--	--	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
Field East of Refinery	MW-57	Shallow	669935.59	527579.02	3,350.95	3,350.91	3,340.95	10 to 30	04/02/19	--	25.40	3,325.51	--
									10/22/19	--	16.32	3,334.59	--
									04/14/20	--	--	--	--
	MW-58	Shallow	670207.27	525197.99	3,362.56	3,362.22	3,349.56	13 to 28	04/02/19	22.70	22.74	3,339.51	0.04
									10/22/19	--	19.92	3,342.30	--
									04/14/20	--	--	--	--
	MW-111	Shallow	670494.22	525254.30	3,362.52	3,365.51	3,337.52	25 to 40	04/02/19	--	25.98	3,339.53	--
									10/22/19	--	24.20	3,341.31	--
									04/14/20	--	24.80	3,340.71	--
	MW-112	Shallow	670890.64	526198.73	3,355.38	3,358.38	3,330.38	25 to 35	04/02/19	22.66	24.48	3,335.36	1.82
									10/22/19	19.80	23.00	3,337.94	3.20
									04/14/20	--	23.08	3,335.30	--
	MW-113	Shallow	670693.80	527483.95	3,350.06	3,352.93	3,330.06	20 to 35	04/02/19	--	25.53	3,327.40	--
									10/22/19	--	18.88	3,334.05	--
									04/14/20	--	25.43	3,327.50	--
	MW-125	Shallow	673288.01	524663.00	3,355.60	3,358.81	3,340.60	15 to 25	04/02/19	--	13.78	3,345.03	--
									10/22/19	--	16.11	3,342.70	--
									04/14/20	--	17.82	3,340.99	--
	MW-126A	Shallow	672845.69	525458.24	3,353.60	3,356.60	3,334.60	19 to 34	04/02/19	--	16.67	3,339.93	--
									10/22/19	--	17.37	3,339.23	--
									04/14/20	--	--	--	--
	MW-126B	Valley Fill	672843.26	525464.41	3,353.60	3,356.67	3,313.60	40 to 50	04/02/19	--	16.58	3,340.09	--
									10/22/19	--	17.27	3,339.40	--
									04/14/20	--	--	--	--
	MW-127	Shallow	672184.21	525464.20	3,355.50	3,358.39	3,335.50	20 to 50	04/02/19	--	20.73	3,337.66	--
									10/22/19	20.31	21.72	3,337.80	1.41
									04/14/20	21.95	23.45	3,336.14	1.50
	MW-128	Shallow	671846.09	524917.06	3,358.80	3,358.77	3,343.80	15 to 35	04/02/19	--	16.16	3,342.61	--
									10/22/19	16.02	17.03	3,342.55	1.01
									04/14/20	17.50	19.60	3,340.85	2.10
	MW-129	Shallow	671185.08	524876.72	3,361.60	3,364.38	3,341.60	20 to 50	04/02/19	23.31	23.70	3,340.99	0.39
									10/22/19	22.86	23.00	3,341.49	0.14
									04/14/20	22.65	23.35	3,341.59	0.70

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
Field East of Refinery	MW-130	Shallow	670331.35	524029.44	3,370.20	3,369.86	3,340.20	30 to 45	04/02/19	--	20.94	3,348.92	--
									10/22/19	--	20.30	3,349.56	--
									04/14/20	--	--	--	--
	MW-131	Shallow	671104.83	525228.77	3,360.40	3,363.49	3,340.40	20 to 50	04/02/19	24.58	24.71	3,338.88	0.13
									10/22/19	--	23.85	3,339.64	--
									04/14/20	25.40	25.42	3,338.09	0.02
	MW-132	Shallow	670346.80	526629.79	3,354.30	3,357.12	3,339.30	15 to 40	04/02/19	21.01	22.91	3,335.73	1.90
									10/22/19	17.83	18.53	3,339.15	0.70
									04/14/20	21.10	23.60	3,335.52	2.50
	MW-133	Shallow	672005.89	527446.73	3,343.40	3,349.45	3,328.40	15 to 35	04/02/19	20.47	21.70	3,328.73	1.23
									10/22/19	17.21	17.50	3,332.18	0.29
									04/14/20	21.10	22.30	3,328.11	1.20
	MW-134	Shallow	673271.80	527263.99	3,343.10	3,346.23	3,323.10	20 to 30	04/02/19	--	16.54	3,329.69	--
									10/22/19	--	16.74	3,329.49	--
									04/14/20	--	--	--	--
	MW-135	Shallow	671758.72	530211.23	3,338.00	3,337.65	3,303.00	35 to 65	04/02/19	--	30.50	3,307.15	--
									10/22/19	--	28.81	3,308.84	--
									04/14/20	--	--	--	--
	RW-12R	Shallow	670542.50	527519.20	3,350.58	3,351.54	3,335.58	15 to 35	04/02/19	--	26.11	3,325.43	--
									10/22/19	--	18.79	3,332.75	--
									04/14/20	--	--	--	--
	RW-13R	Shallow	671049.37	527506.74	3,349.60	3,351.54	3,334.60	15 to 35	04/02/19	23.82	24.12	3,327.66	0.30
									10/22/19	18.00	18.52	3,333.44	0.52
									04/14/20	--	--	--	--
	RW-14R	Shallow	671592.73	527504.45	3,347.39	3,349.37	3,332.39	15 to 35	04/02/19	21.26	22.81	3,327.80	1.55
									10/22/19	18.74	18.89	3,330.60	0.15
									04/14/20	--	--	--	--
	RW-18A	Shallow	673750.19	526188.64	3,349.04	3,350.84	Unknown	Unknown	04/02/19	--	13.59	3,337.25	--
									10/22/19	--	14.02	3,336.82	--
									04/14/20	--	16.41	3,334.43	--
	RW-20A	Shallow	671032.06	527790.95	3,347.75	3,348.44	Unknown	Unknown	04/02/19	>19.98 ⁽³⁾	>19.98 ⁽³⁾	--	>0.00 ⁽³⁾
									10/22/19	--	19.34	3,329.10	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
Field East of Refinery	RW-20B	Shallow	671032.06	527790.95	3,347.75	3,348.44	Unknown	Unknown	04/02/19	22.23	>22.53 ⁽³⁾	--	>0.30 ⁽³⁾
									10/22/19	--	19.13	3,329.31	--
									04/14/20	--	--	--	--
	RW-22	Shallow	671009.70	527889.44	3,347.17	3,349.21	3,335.67	11.5 to 39	04/02/19	26.13	28.71	3,322.56	2.58
									10/22/19	16.73	16.79	3,332.47	0.06
									04/14/20	--	--	--	--
North Refinery	MW-23	Shallow	672851.25	522821.05	3,365.09	3,368.38	3,350.09	15 to 20	04/02/19	--	13.72	3,354.66	--
									10/22/19	--	14.86	3,353.52	--
									04/14/20	--	--	--	--
	MW-29	Shallow	673481.15	523544.65	3,359.79	3,360.64	3,350.04	9.75 to 19.25	04/02/19	--	15.77	3,344.87	--
									10/22/19	--	18.21	3,342.43	--
									04/14/20	--	19.03	3,341.61	--
	MW-30	Shallow	674124.92	523550.16	3,359.14	3,361.98	Unknown	Unknown	04/02/19	--	10.84	3,351.14	--
									10/22/19	--	12.41	3,349.57	--
									04/14/20	--	--	--	--
	MW-39	Shallow	673039.50	523422.93	3,357.94	3,358.79	3,343.94	14 to 24	04/02/19	--	10.90	3,347.89	--
									10/22/19	--	12.92	3,345.87	--
									04/14/20	--	--	--	--
	MW-40	Shallow	673161.12	523489.02	3,356.56	3,356.93	Unknown	Unknown	04/02/19	--	9.37	3,347.56	--
									10/22/19	--	11.44	3,345.49	--
									04/14/20	--	11.75	3,345.18	--
	MW-41	Shallow	673379.87	523374.64	3,356.38	3,356.58	3,342.38	14 to 19	04/02/19	--	9.63	3,346.95	--
									10/22/19	--	10.66	3,345.92	--
									04/14/20	--	--	--	--
	MW-42	Shallow	673480.27	523263.53	3,355.64	3,358.44	Unknown	Unknown	04/02/19	--	11.19	3,347.25	--
									10/22/19	--	13.03	3,345.41	--
									04/14/20	--	--	--	--
	MW-43	Shallow	673115.86	522950.40	3,363.38	3,365.49	3,347.88	15.5 to 20.5	04/02/19	--	10.77	3,354.72	--
									10/22/19	--	12.05	3,353.44	--
									04/14/20	--	--	--	--
	MW-59	Shallow	672814.66	523854.12	3,359.44	3,362.43	3,344.44	15 to 30	04/02/19	--	12.01	3,350.42	--
									10/22/19	--	14.23	3,348.20	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
North Refinery	MW-60	Shallow	672849.58	524143.12	3,359.26	3,361.98	3,344.26	15 to 30	04/02/19	--	13.20	3,348.78	--
									10/22/19	--	15.40	3,346.58	--
									04/14/20	--	--	--	--
	MW-61	Shallow	672453.76	522578.38	3,369.45	3,369.47	3,355.45	14 to 29	04/02/19	--	12.26	3,357.21	--
									10/22/19	--	10.94	3,358.53	--
									04/14/20	--	--	--	--
	MW-62	Shallow	672650.76	522696.50	3,368.35	3,368.81	3,354.35	14 to 29	04/02/19	--	13.75	3,355.06	--
									10/22/19	--	14.57	3,354.24	--
									04/14/20	--	--	--	--
	MW-67	Shallow	673224.88	522342.43	3,365.59	3,365.45	3,353.59	12 to 27	04/02/19	--	10.07	3,355.38	--
									10/22/19	10.59	10.62	3,354.85	0.03
									04/14/20	--	--	--	--
	MW-90	Shallow	672909.28	521960.18	3,367.13	3,369.42	3,362.13	5 to 20	04/02/19	--	11.69	3,357.73	--
									10/22/19	--	10.94	3,358.48	--
									04/14/20	--	--	--	--
	MW-91	Shallow	672945.86	522167.26	3,365.72	3,367.73	3,358.72	7 to 22	04/02/19	--	11.18	3,356.55	--
									10/22/19	--	10.91	3,356.82	--
									04/14/20	--	--	--	--
	MW-92	Shallow	672766.10	522167.26	3,366.75	3,368.72	3,361.75	5 to 20	04/02/19	11.89	11.97	3,356.81	0.08
									10/22/19	11.45	11.92	3,357.18	0.47
									04/14/20	--	--	--	--
	MW-93	Shallow	672897.25	522446.83	3,364.22	3,363.79	3,359.22	5 to 20	04/02/19	--	8.16	3,355.63	--
									10/22/19	--	8.24	3,355.55	--
									04/14/20	--	--	--	--
	MW-94	Shallow	673510.54	522336.27	3,365.82	3,367.97	3,360.82	5 to 20	04/02/19	12.90	12.94	3,355.06	0.04
									10/22/19	13.21	14.45	3,354.51	1.24
									04/14/20	--	--	--	--
	MW-95	Shallow	673084.72	522308.89	3,366.48	3,368.70	3,359.48	7 to 22	04/02/19	--	12.87	3,355.83	--
									10/22/19	--	13.10	3,355.60	--
									04/14/20	--	--	--	--
	MW-96	Shallow	673143.60	521917.50	3,366.83	3,368.92	3,359.83	7 to 22	04/02/19	--	11.56	3,357.36	--
									10/22/19	--	10.93	3,357.99	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
North Refinery	MW-97	Shallow	672660.45	522295.96	3,366.38	3,365.92	3,358.38	8 to 23	04/02/19	10.02	10.86	3,355.73	0.84
									10/22/19	10.40	10.48	3,355.50	0.08
									04/14/20	--	--	--	--
	MW-98	Shallow	672517.05	523220.39	3,358.96	3,361.36	3,345.96	13 to 23	04/02/19	--	9.50	3,351.86	--
									10/22/19	--	10.97	3,350.39	--
									04/14/20	--	--	--	--
	MW-137	Shallow	672923.48	522924.27	3,363.15	3,364.83	3,353.15	10 to 30	04/02/19	--	8.83	3,356.00	--
									10/22/19	10.12	10.30	3,354.67	0.18
									04/14/20	--	--	--	--
	MW-138	Shallow	672876.52	523041.05	3,364.73	3,363.24	3,354.73	10 to 25	04/02/19	--	10.46	3,352.78	--
									10/22/19	11.51	12.42	3,351.55	0.91
									04/14/20	--	--	--	--
	RW-1	Shallow	672825.27	522204.68	3,365.29	3,367.03	Unknown	Unknown	04/02/19	--	10.90	3,356.13	--
									10/22/19	--	10.68	3,356.35	--
									04/14/20	--	--	--	--
	RW-2	Shallow	672781.86	522337.29	3,368.17	3,368.17	Unknown	Unknown	04/02/19	12.22	12.42	3,355.91	0.20
									10/22/19	--	12.17	3,356.00	--
									04/14/20	--	--	--	--
	RW-7	Shallow	673579.35	522098.94	3,365.03	3,367.09	Unknown	Unknown	04/02/19	--	11.74	3,355.35	--
									10/22/19	--	11.78	3,355.31	--
									04/14/20	--	--	--	--
	RW-8	Shallow	673266.20	522321.21	3,364.89	3,368.10	Unknown	Unknown	04/02/19	12.14	12.40	3,355.91	0.26
									10/22/19	--	14.93	3,353.17	--
									04/14/20	--	--	--	--
	RW-9	Shallow	673423.49	523371.16	3,356.30	3,359.51	Unknown	Unknown	04/02/19	--	10.76	3,348.75	--
									10/22/19	--	12.80	3,346.71	--
									04/14/20	--	--	--	--
	RW-10	Shallow	673076.17	523469.29	3,356.12	3,360.61	Unknown	Unknown	04/02/19	--	10.79	3,349.82	--
									10/22/19	--	12.82	3,347.79	--
									04/14/20	--	--	--	--
	RW-16B	Shallow	673876.71	523156.09	3,357.20	3,360.97	Unknown	Unknown	04/02/19	--	12.92	3,348.05	--
									10/22/19	--	14.41	3,346.56	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
North Refinery	RW-17A	Shallow	673978.33	522723.59	3,362.76	3,364.72	Unknown	Unknown	04/02/19	--	11.12	3,353.60	--
									10/22/19	--	12.07	3,352.65	--
									04/14/20	--	--	--	--
North RO Reject Field	MW-117	Shallow	674301.52	522979.73	3,360.07	3,363.01	3,350.07	10 to 25	04/02/19	--	10.38	3,352.63	--
									10/22/19	--	11.78	3,351.23	--
									04/14/20	--	13.37	3,349.64	--
	MW-118	Shallow	674819.18	523375.94	3,359.62	3,361.95	3,349.62	10 to 25	04/02/19	--	11.39	3,350.56	--
									10/22/19	--	15.19	3,346.76	--
									04/14/20	--	16.10	3,345.85	--
North RO Reject Field	MW-119	Shallow	674860.11	524575.80	3,353.83	3,356.11	3,343.83	10 to 25	04/02/19	--	11.52	3,344.59	--
									10/22/19	--	13.70	3,342.41	--
									04/14/20	--	16.47	3,339.64	--
	MW-18	Shallow	674172.45	522318.86	3,358.54	3,361.02	3,343.54	15 to 19	04/02/19	--	11.22	3,349.80	--
									10/22/19	--	11.78	3,349.24	--
									04/14/20	--	--	--	--
NCL	MW-19	Shallow	673597.29	521670.75	3,366.00	3,368.00	3,361.00	5 to 19.5	04/02/19	--	11.32	3,356.68	--
									10/22/19	--	10.55	3,357.45	--
									04/14/20	--	--	--	--
	MW-45	Shallow	674247.07	523663.75	3,351.32	3,351.51	3,340.82	10.5 to 15.5	04/02/19	--	6.19	3,345.32	--
									10/22/19	--	7.82	3,343.69	--
									04/14/20	--	--	--	--
	MW-53	Shallow	673626.07	521459.12	3,368.86	3,368.73	3,355.06	13.8 to 23.8	04/02/19	--	11.81	3,356.92	--
									10/22/19	--	-- ⁽⁵⁾	--	--
									04/14/20	--	--	--	--
	MW-54A	Shallow	674138.65	522110.51	3,363.55	3,366.49	3,350.85	12.7 to 27.7	04/02/19	--	12.06	3,354.43	--
									10/22/19	--	12.47	3,354.02	--
									04/14/20	--	--	--	--
	MW-54B	Valley Fill	674148.44	522118.80	3,363.47	3,366.47	3,329.67	33.8 to 43.8	04/02/19	--	12.07	3,354.40	--
									10/22/19	--	12.51	3,353.96	--
									04/14/20	--	--	--	--
NCL	MW-55	Shallow	674091.95	522766.46	3,361.90	3,364.77	3,348.20	13.7 to 23.7	04/02/19	--	11.39	3,353.38	--
									10/22/19	--	12.51	3,352.26	--
									04/14/20	--	13.78	3,350.99	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
NCL	MW-56	Shallow	674160.38	523450.14	3,354.84	3,357.44	3,341.44	13.4 to 23.4	04/02/19	--	11.79	3,345.65	--
									10/22/19	--	13.21	3,344.23	--
									04/14/20	--	15.58	3,341.86	--
	MW-108	Shallow	673659.33	521910.16	3,366.25	3,369.11	3,357.25	9 to 24	04/02/19	--	13.45	3,355.66	--
									10/23/19	--	13.24	3,355.87	--
									04/14/20	--	--	--	--
	NCL-31	Shallow	673629.51	521669.01	3,366.21	3,367.54	3,353.21	13 to 18	04/02/19	--	11.00	3,356.54	--
									10/23/19	--	10.22	3,357.32	--
									04/14/20	--	--	--	--
	NCL-32	Shallow	673984.83	521808.14	3,364.96	3,364.91	3,347.96	17 to 22	04/02/19	--	10.04	3,354.87	--
									10/22/19	--	10.01	3,354.90	--
									04/14/20	--	--	--	--
	NCL-33	Shallow	673967.20	522245.18	3,364.26	3,363.97	3,351.26	13 to 18	04/02/19	--	9.43	3,354.54	--
									10/22/19	--	9.87	3,354.10	--
									04/14/20	--	--	--	--
	NCL-34A	Shallow	673885.52	522235.08	3,364.82	3,365.49	3,348.82	16 to 21	04/02/19	--	11.02	3,354.47	--
									10/22/19	--	11.24	3,354.25	--
									04/14/20	--	--	--	--
	NCL-44	Shallow	673986.41	522062.11	3,364.01	3,364.45	Unknown	Unknown	04/02/19	--	9.41	3,355.04	--
									10/22/19	--	9.62	3,354.83	--
									04/14/20	--	--	--	--
South Refinery	NCL-49	Shallow	674099.16	521648.40	3,368.26	3,371.13	3,351.46	16.8 to 17.8	04/02/19	--	16.04	3,355.09	--
									10/22/19	--	15.94	3,355.19	--
									04/14/20	--	--	--	--
	KWB-2R	Shallow	670207.24	524897.59	3,364.56	3,364.32	Unknown	Unknown	04/03/19	--	23.73	3,340.59	--
									10/22/19	21.20	21.21	3,343.12	0.01
									04/14/20	--	--	--	--
	KWB-4	Shallow	670616.38	524572.44	3,368.36	3,370.25	3,348.36	20 to 39	04/02/19	24.99	26.63	3,344.93	1.64
									10/22/19	24.52	26.25	3,345.38	1.73
									04/14/20	25.95	27.00	3,344.09	1.05
	KWB-5	Shallow	670729.55	525244.51	3,362.60	3,364.72	3,337.90	24.7 to 38.7	04/02/19	--	24.90	3,339.82	--
									10/22/19	23.15	24.86	3,341.23	1.71
									04/14/20	--	25.56	3,339.16	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
South Refinery	KWB-6	Shallow	670449.36	526158.70	3,358.02	3,360.30	3,340.52	17.5 to 36.5	04/02/19	23.63	25.40	3,336.32	1.77
										20.41	20.55	3,339.86	0.14
										23.80	25.78	3,336.10	1.98
	MW-28	Shallow	671508.38	524521.56	3,366.79	3,370.27	3,341.79	25 to 30	04/02/19	--	23.45	3,346.82	--
										--	23.23	3,347.04	--
										--	19.45	3,350.82	--
	MW-48	Shallow	670689.39	524080.35	3,363.04	3,362.97	Unknown	Unknown	04/02/19	--	19.11	3,343.86	--
										--	18.71	3,344.26	--
										--	--	--	--
	MW-50	Shallow	671502.45	521857.84	3,368.91	3,371.05	Unknown	Unknown	04/02/19	--	15.42	3,355.63	--
										--	14.22	3,356.83	--
										--	--	--	--
	MW-52	Shallow	670165.24	523370.99	3,368.36	3,368.30	Unknown	Unknown	04/02/19	--	19.79	3,348.51	--
										--	18.73	3,349.57	--
										--	--	--	--
	MW-64	Shallow	670716.03	523338.61	3,365.56	3,369.52	3,350.56	15 to 30	04/02/19	--	19.86	3,349.66	--
										--	19.45	3,350.07	--
										--	--	--	--
	MW-65	Shallow	670949.22	523711.75	3,363.84	3,363.60	3,349.34	14.5 to 29.5	04/02/19	--	16.22	3,347.38	--
										--	16.18	3,347.42	--
										--	--	--	--
	MW-66	Shallow	671247.57	524560.06	3,363.66	3,363.46	3,349.06	14.6 to 29.6	04/02/19	--	17.65	3,345.81	--
										--	17.17	3,346.29	--
										--	18.70	3,344.76	--
	MW-99	Shallow	671652.52	524579.74	3,365.11	3,364.51	3,353.11	12 to 27	04/02/19	--	18.48	3,346.03	--
										--	17.95	3,346.56	--
										--	19.50	3,345.01	--
	MW-101	Shallow	671628.25	523506.58	3,362.07	3,364.23	3,354.07	8 to 23	04/02/19	--	15.05	3,349.18	--
										--	14.67	3,349.56	--
										--	--	--	--
	MW-102	Shallow	671176.70	522937.01	3,365.51	3,367.64	3,353.51	12 to 27	04/02/19	--	15.72	3,351.92	--
										--	15.16	3,352.48	--
										--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
South Refinery	MW-103	Shallow	670472.55	522607.80	3,370.89	3,372.47	3,363.89	7 to 22	04/02/19	--	19.09	3,353.38	--
									10/22/19	--	17.28	3,355.19	--
									04/14/20	--	--	--	--
	MW-104	Shallow	670450.35	522729.44	3,369.41	3,371.43	3,366.41	3 to 18	04/02/19	--	17.15	3,354.28	--
									10/22/19	--	13.15	3,358.28	--
									04/14/20	--	--	--	--
	MW-105	Shallow	671924.44	522454.93	3,365.20	3,364.99	3,357.20	8 to 18	04/02/19	--	8.73	3,356.26	--
									10/22/19	--	9.40	3,355.59	--
									04/14/20	--	--	--	--
	MW-106	Shallow	672207.14	523454.55	3,359.29	3,358.98	3,359.29	0 to 11	04/02/19	--	8.56	3,350.42	--
									10/22/19	--	9.30	3,349.68	--
									04/14/20	--	--	--	--
	MW-107	Shallow	671961.38	524600.45	3,359.63	3,359.44	3,347.63	12 to 22	04/02/19	--	13.80	3,345.64	--
									10/22/19	--	14.15	3,345.29	--
									04/14/20	--	15.85	3,343.59	--
	MW-109	Shallow	670174.25	523065.52	3,368.27	3,368.09	3,353.27	15 to 29.5	04/02/19	--	18.60	3,349.49	--
									10/22/19	--	17.23	3,350.86	--
									04/14/20	--	--	--	--
	MW-110	Shallow	670174.33	522796.69	3,368.46	3,368.03	3,353.46	15 to 29.5	04/02/19	--	16.66	3,351.37	--
									10/22/19	--	14.69	3,353.34	--
									04/14/20	--	--	--	--
	MW-139	Shallow	670687.2	522149.2	3374.32	3374.05	3,364.32	10 to 30	04/01/19	--	--	--	--
									10/22/19	--	13.67	3,360.38	--
									04/14/20	--	--	--	--
	RW-4	Shallow	671378.27	523010.47	3,364.41	3,364.86	Unknown	Unknown	04/02/19	--	14.22	3,350.64	--
									10/22/19	--	13.63	3,351.23	--
									04/14/20	--	--	--	--
	RW-5R	Shallow	671258.01	523662.01	3,362.79	3,368.56	3,349.79	13 to 33	04/02/19	19.71	19.94	3,348.80	0.23
									10/22/19	21.28	21.35	3,347.27	0.07
									04/14/20	--	--	--	--
	RW-6	Shallow	670969.39	522843.22	3,366.03	3,368.36	Unknown	Unknown	04/02/19	--	15.34	3,353.02	--
									10/22/19	17.82	21.65	3,349.77	3.83
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
South Refinery	RW-11-0	Shallow	66938.15	527541.66	3,351.48	3,353.95	Unknown	Unknown	04/02/19	--	Dry	--	--
									10/22/19	--	18.38	3,335.57	--
									04/14/20	--	--	--	--
	RW-15C	Shallow	670820.45	524123.41	3,362.65	3,361.41	Unknown	Unknown	04/02/19	--	17.15	3,344.26	--
									10/22/19	16.70	16.71	3,344.71	0.01
									04/14/20	--	--	--	--
South RO Reject Field	RW-19	Shallow	670611.43	524592.99	3,367.09	3,369.11	3,356.09	11 to 46	04/02/19	25.56	25.60	3,343.54	0.04
									10/22/19	32.40	32.58	3,336.67	0.18
									04/14/20	--	--	--	--
	MW-114	Shallow	673082.16	523818.86	3,358.62	3,361.68	3,338.62	20 to 35	04/02/19	--	11.12	3,350.56	--
									10/22/19	--	13.47	3,348.21	--
									04/14/20	--	13.98	3,347.70	--
TEL	MW-115	Shallow	673997.34	523932.93	3,356.48	3,359.31	3,346.48	10 to 25	04/02/19	--	10.36	3,348.95	--
									10/22/19	--	12.95	3,346.36	--
									04/14/20	--	14.89	3,344.42	--
	MW-116	Shallow	673966.06	525339.63	3,350.99	3,353.77	3,340.99	10 to 25	04/02/19	--	11.55	3,342.22	--
									10/22/19	--	12.77	3,341.00	--
									04/14/20	--	15.53	3,338.24	--
TEL	MW-49	Shallow	672051.80	523610.79	3,359.73	3,359.63	Unknown	Unknown	04/02/19	--	11.95	3,347.68	--
									10/22/19	--	11.24	3,348.39	--
									04/14/20	--	--	--	--
	TEL-1	Shallow	672966.33	523412.82	3,356.79	3,358.23	3,343.79	13 to 23	04/02/19	--	10.31	3,347.92	--
									10/22/19	--	12.28	3,345.95	--
									04/14/20	--	--	--	--
TEL	TEL-2	Shallow	672885.90	523419.29	3,356.80	3,359.12	3,343.80	13 to 23	04/02/19	--	11.07	3,348.05	--
									10/22/19	13.02	13.04	3,346.10	0.02
									04/14/20	--	--	--	--
	TEL-3	Shallow	672796.06	523459.33	3,356.43	3,358.33	3,343.43	13 to 23	04/02/19	--	10.17	3,348.16	--
									10/22/19	--	12.12	3,346.21	--
									04/14/20	--	--	--	--
TEL	TEL-4	Shallow	672715.99	523181.18	3,358.21	3,360.24	3,345.21	13 to 23	04/02/19	--	9.86	3,350.38	--
									10/22/19	--	11.43	3,348.81	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
TMD	MW-8	Shallow	673215.93	529055.18	3,334.81	3,336.42	Unknown	Unknown	04/02/19	--	15.89	3,320.53	--
									10/22/19	--	13.13	3,323.29	--
									04/14/20	--	--	--	--
	MW-9	Shallow	673169.56	529232.03	3,334.50	3,336.20	Unknown	Unknown	04/02/19	--	16.42	3,319.78	--
									10/22/19	--	13.61	3,322.59	--
									04/14/20	--	--	--	--
	MW-16	Shallow	675613.35	534389.17	3,313.50	3,316.12	3,305.00	8.5 to 19	04/02/19	--	10.03	3,306.09	--
									10/22/19	--	7.44	3,308.68	--
									04/14/20	--	--	--	--
	MW-20	Shallow	673800.56	527834.67	3,338.43	3,340.91	3,328.93	9.5 to 23.5	04/02/19	--	14.25	3,326.66	--
									10/22/19	--	11.63	3,329.28	--
									04/14/20	--	--	--	--
	MW-21	Shallow	673180.38	529150.62	3,334.65	3,337.31	3,327.15	7.5 to 22	04/02/19	--	15.24	3,322.07	--
									10/22/19	--	12.56	3,324.75	--
									04/14/20	--	--	--	--
	MW-25	Shallow	675386.30	537955.86	3,310.35	3,312.29	3,294.60	15.75 to 25.25	04/02/19	--	14.16	3,298.13	--
									10/22/19	--	12.14	3,300.15	--
									04/14/20	--	--	--	--
	MW-26	Shallow	676229.18	535348.61	3,312.08	3,314.87	3,296.83	15.25 to 24.25	04/02/19	--	11.09	3,303.78	--
									10/22/19	--	7.09	3,307.78	--
									04/14/20	--	--	--	--
	MW-27	Shallow	674495.64	532942.65	3,319.46	3,320.85	3,301.21	18.25 to 27.75	04/02/19	--	18.72	3,302.13	--
									10/22/19	--	15.68	3,305.17	--
									04/14/20	--	--	--	--
	MW-46R	Shallow	674223.03	524920.28	3,350.41	3,350.11	3,346.91	3.5 to 18.5	04/02/19	--	8.23	3,341.88	--
									10/22/19	--	10.31	3,339.80	--
									04/14/20	--	--	--	--
	MW-68	Shallow	674301.02	531466.90	3,325.81	3,328.21	3,311.06	14.75 to 24.5	04/02/19	--	22.52	3,305.69	--
									10/22/19	--	19.78	3,308.43	--
									04/14/20	--	--	--	--
	MW-71	Shallow	673016.80	529560.41	3,332.99	3,335.29	3,323.24	9.75 to 19.5	04/02/19	--	16.78	3,318.51	--
									10/22/19	--	13.87	3,321.42	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
TMD	MW-89	Shallow	675221.56	533835.00	3,316.38	3,318.32	3,314.38	2 to 17	04/02/19	--	11.88	3,306.44	--
									10/22/19	--	8.98	3,309.34	--
									04/14/20	--	--	--	--
	NP-1	Shallow	672992.73	528035.04	3,339.69	3,342.40	3,330.19	9.5 to 19	04/02/19	--	17.52	3,324.88	--
									10/22/19	--	15.71	3,326.69	--
									04/14/20	--	--	--	--
	NP-2	Shallow	673571.19	527611.64	3,340.58	3,342.77	3,331.08	9.5 to 18.5	04/02/19	--	15.67	3,327.10	--
									10/22/19	--	16.21	3,326.56	--
									04/14/20	--	--	--	--
	NP-3	Shallow	673990.66	528019.54	3,340.40	3,342.93	3,330.90	9.5 to 18.5	04/02/19	--	16.43	3,326.50	--
									10/22/19	--	15.86	3,327.07	--
									04/14/20	--	--	--	--
	NP-4	Shallow	674337.35	528351.85	3,343.24	3,345.73	3,318.74	24.5 to 33.5	04/02/19	--	24.53	3,321.20	--
									10/22/19	--	28.91	3,316.82	--
									04/14/20	--	--	--	--
	NP-6	Shallow	672945.23	529083.91	3,336.31	3,338.05	3,327.56	8.75 to 18.75	04/02/19	--	15.24	3,322.81	--
									10/22/19	--	12.05	3,326.00	--
									04/14/20	--	--	--	--
	NP-8	Shallow	675399.60	538245.49	3,310.53	3,314.67	Unknown	Unknown	04/02/19	--	12.75	3,301.92	--
									10/22/19	--	11.89	3,302.78	--
									04/14/20	--	--	--	--
	NP-9	Shallow	674767.14	523571.69	3,357.86	3,360.62	Unknown	Unknown	04/02/19	--	10.44	3,350.18	--
									10/22/19	--	13.92	3,346.70	--
									04/14/20	--	--	--	--
Up-Gradient	UG-1	Shallow	672453.27	520746.73	3,373.02	3,372.94	3,365.02	8 to 23	04/01/19	--	13.45	3,359.49	--
									10/22/19	--	--	--	--
									04/14/20	--	--	--	--
	UG-2	Shallow	670726.77	520942.36	3,380.30	3,380.41	3,365.30	15 to 30	04/01/19	--	18.52	3,361.89	--
									10/22/19	--	--	--	--
									04/14/20	--	--	--	--
	UG-3R	Shallow	671992.70	519424.77	3,384.62	3,384.08	3,367.62	17 to 37	04/01/19	--	23.11	3,360.97	--
									10/22/19	--	--	--	--
									04/14/20	--	--	--	--

Table 1 - Well Information and Gauging Data

2019 and April 2020

HollyFrontier Navajo Refining LLC, Artesia Refinery, Artesia, New Mexico

Area	Well ID+B5B5:C 401	Water-Bearing Zone ⁽¹⁾	Northing (ft)	Easting (ft)	Land Surface Elevation (ft amsl)	TOC Elevation (ft amsl)	Top of Screen Elevation (ft amsl)	Screen Interval (ft bgs)	Date Measured	Depth to PSH (ft btoc)	Depth to Water (ft btoc)	Corrected Groundwater Elevation ⁽²⁾ (ft amsl)	PSH Thickness (ft)
Up Gradient	UG-4	Shallow	674087.85	520541.74	3,377.78	3,377.36	3,358.28	19.5 to 39.5	04/01/19	--	19.57	3,357.79	--
									10/22/19	--	--	--	--
RO Fields (Not included in Annual GW Monitoring Program)	MW-140	--	--	--	--	3361.23	--	--	4/14/20	--	--	--	--
									7/15/19	--	9.46	3351.77	--
									10/22/19	--	9.31	3351.92	--
									1/16/20	--	11.21	3350.02	--
									4/14/20	--	10.45	3351.78	--
RO Fields (Not included in Annual GW Monitoring Program)	MW-141	--	--	--	--	3359.89	--	--	7/15/19	--	10.62	3349.27	--
									10/22/19	--	9.95	3349.94	--
									1/16/20	--	11.35	3348.54	--
									4/14/20	--	10.38	3349.51	--
									7/12/19	--	13.16	3342.62	--
	MW-142	--	--	--	--	3355.78	--	--	10/22/19	--	13.13	3342.65	--
									1/16/20	--	15.35	3340.43	--
									4/14/20	--	15.80	3340.98	--
									7/12/19	--	13.51	3342.34	--
									10/22/19	--	13.58	3342.27	--
RO Fields (Not included in Annual GW Monitoring Program)	MW-143	--	--	--	--	3355.85	--	--	1/16/20	--	15.96	3339.89	--
									4/14/20	--	16.47	3340.38	--
									7/16/19	--	14.51	3336.61	--
									10/22/19	--	13.13	3337.99	--
									1/16/20	--	15.75	3335.37	--
	MW-144	--	--	--	--	3351.12	--	--	4/14/20	--	16.35	3335.77	--

Notes:

⁽¹⁾ Wells screened in the shallow water-bearing zone are typically screened at depths ranging between 5 and 35 ft bgs. The shallow water-bearing zone varies between confined and unconfined conditions. Wells screened in the valley fill zone are typically screened at depths ranging between 35 and 70 ft bgs. The clay lens separating the shallow and valley fill zones is discontinuous in some locations resulting in connectivity between the two zones.

⁽²⁾ Water elevations corrected for PSH, if present, using a specific gravity of 0.8.

⁽³⁾ Top of recovery pump prevented deeper measurement.

⁽⁴⁾ Blockage in well prevented deeper measurement.

⁽⁵⁾ Well not located

Definitions:

ft = feet

-- = not applicable

amsl = above mean sea level

bgs = below ground surface

btoc = below top of casing

NCL = North Colony Landfarm

TEL = Tetra Ethyl Lead Surface Impoundment

unknown = screen interval not readily available

TMD = Three Mile Ditch

PSH = phase separated hydrocarbons

RO = Reverse Osmosis

NM = not measured

TMD = Three Mile Ditch

TOC = Top of Casing

From: [Chavez, Carl J. EMNRD](#)
To: [Denton, Scott](#)
Cc: [Wade, Gabriel. EMNRD](#); [Griswold, Jim. EMNRD](#); [Combs, Robert](#); [Leik, Jason](#)
Bcc: [Brancard, Bill. EMNRD](#)
Subject: RE: HFNR RO Fields Stage 1 Abatement Plan - Monitoring Delay Request
Date: Tuesday, April 14, 2020 4:54:00 PM

Scott, et al.:

Approved.

Thank you.

Mr. Carl J. Chavez, CHMM (#13099)
New Mexico Oil Conservation Division (Albuquerque Office)
Energy Minerals and Natural Resources Department
5200 Oakland Avenue, NE
Albuquerque, New Mexico 87113
Ph. (505) 660-7923
E-mail: CarlJ.Chavez@state.nm.us

“Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?” (To see how, go to: <http://www.emnrd.state.nm.us/OCD> and see “Publications”)

From: Denton, Scott <Scott.Denton@HollyFrontier.com>
Sent: Tuesday, April 14, 2020 3:37 PM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Cc: Wade, Gabriel, EMNRD <Gabriel.Wade@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Combs, Robert <Robert.Combs@HollyFrontier.com>; Leik, Jason <Jason.Leik@HollyFrontier.com>; Denton, Scott <Scott.Denton@HollyFrontier.com>
Subject: [EXT] HFNR RO Fields Stage 1 Abatement Plan - Monitoring Delay Request

Carl,

I hope you are doing well and staying healthy! We are pretty fortunate in the SE with very few COVID cases so far...fingers crossed!

As you are probably aware, HFNR was planning to perform the 4th quarterly sampling event for the RO Fields Stage 1 Abatement Plan at the RO fields using the same crew and during the same mobilization as the semi-annual groundwater monitoring. This will be the final quarterly sampling event as described in the RO field investigation work plan.

We would hereby like to request the same extension for the RO field sampling (60 day delay with re-evaluation after 45 days) for the same reasons as described below that was approved for the semi-annual groundwater sampling.

During the 60 day delay, HFNR will prepare and submit the 3rd quarter data, and will continue to operate the moisture probes. HFNR will also have a local contractor collect a round of groundwater level measurements.

Please contact me or Robert if you have any questions.

Thanks,

SMD

Scott M. Denton
Environmental Manager

HollyFrontier Navajo Refining LLC
P.O. Box 159
Artesia, NM 88211-0159
575-746-5487 (o)
970-581-7268 (c)

From: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Sent: Wednesday, April 8, 2020 10:42 AM
To: Denton, Scott <Scott.Denton@HollyFrontier.com>; Wade, Gabriel, EMNRD <Gabriel.Wade@state.nm.us>; Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>; Tsinnajinnie, Leona, NMENV <Leona.Tsinnajinnie@state.nm.us>
Cc: Combs, Robert <Robert.Combs@HollyFrontier.com>; Leik, Jason <Jason.Leik@HollyFrontier.com>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>
Subject: RE: HFNR Semi-annual GW Monitoring Delay Request

Scott, et al.:

Approved.

Thank you.

Mr. Carl J. Chavez, CHMM (#13099)
New Mexico Oil Conservation Division (Albuquerque Office)
Energy Minerals and Natural Resources Department
5200 Oakland Avenue, NE
Albuquerque, New Mexico 87113
Ph. (505) 660-7923
E-mail: CarlJ.Chavez@state.nm.us

“Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?” (To see how, go to: <http://www.emnrd.state.nm.us/ OCD> and see “Publications”)

From: Denton, Scott <Scott.Denton@HollyFrontier.com>
Sent: Tuesday, April 7, 2020 4:57 PM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>; Wade, Gabriel, EMNRD <Gabriel.Wade@state.nm.us>; Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>; Tsinnajinnie, Leona, NMENV <Leona.Tsinnajinnie@state.nm.us>
Cc: Denton, Scott <Scott.Denton@HollyFrontier.com>; Combs, Robert

<Robert.Combs@HollyFrontier.com>; Leik, Jason <Jason.Leik@HollyFrontier.com>

Subject: [EXT] HFNR Semi-annual GW Monitoring Delay Request

Mr. Carl Chavez
Mr. Gabriel Wade

Mr. Dave Cobrain
Ms. Leona Tsinnajinnie

Request for 60 day delay of Groundwater Sampling at Navajo and Lovington Refineries.

HollyFrontier Navajo Refining (HFNR) conducts groundwater sampling on a semi-annual basis in accordance with the Facility-Wide Groundwater Monitoring Work Plan (FWGMWP) for the Artesia refinery (required by RCRA Permit No. NMD048918817 and OCD Discharge Permit GW-028), and OCD AP-110 for the Lovington refinery. The first sampling event for 2020 is currently scheduled for the week of April 13, 2020 for both facilities.

On March 11, 2020, Governor Michelle Lujan Grisham declared a public health emergency, and through the Department of Health Services has issued several subsequent Public Health Orders. On April 6, 2020, the public health emergency declaration was renewed and extended through April 30, 2020. A Public Health Order issued 3-23-2020 and amended on April 6, 2020 directs all non-essential businesses in New Mexico to close, and for essential businesses in New Mexico to minimize operations and staff to the greatest extent practical. Since this declaration, The Governor has also issued travel restrictions related to air travel for travelers coming to New Mexico from out of state, requiring a 14 day waiting period, and restrictions related to lodging (hotels limited to 25% occupancy beginning April 7). The travel restriction orders do not currently prevent HFNR's contractor from traveling to the site by vehicles(although guidelines suggest that they should self-isolate for 14 days upon entry to New Mexico), but the lodging restrictions may have an impact on the availability of accommodations. It is also possible that additional travel restrictions will be made which would impact our contractor's ability to reach the facility or to return home after the sampling is complete.

Refinery operations are considered to be an essential business as defined in the current Public Health Order. However, the subcontractor that normally performs sampling at the Artesia and Lovington refineries is based in Houston, Texas, and would be sending a team of 9 members to perform sampling at Artesia and Lovington over a 5 day period. HFNR has been weighing manpower options for an acceptable approach to comply with the health orders while meeting the requirements of our RCRA and Discharge Permits. In this evaluation, local contractors and/or HFNR employees would be trained to perform the sampling. HFNR is concerned about the quality of data that would be collected under this approach and how comparable it would be to other monitoring events.

Based on review of historical data, HFNR believes a representative sampling event could be performed by our Houston-based contractor with a 60 day delay without causing any significant data quality impact due to irrigation activities in the region. Any anomalous data obtained or other exceptions to the work plan would be discussed in the Annual

Groundwater Monitoring report, as prescribed in the FWGWMP.

In order to minimize threat to worker health and minimize the potential spread of COVID-19 in accordance with New Mexico directives, HFNR hereby requests postponement of the semi-annual sampling events at Artesia and Lovington for a period of 60 days. HFNR will review the circumstances after 45 days, and make a determination then if the sampling can be performed or should be cancelled based on State of New Mexico directives, risk to workers, and hydrogeologic conditions.

In the interim, HFNR will collect groundwater elevation data from the east side of the Artesia refinery, and will continue to operate the groundwater and LNAPL recovery systems using local personnel.

Please don't hesitate to contact me if you have any questions related to this request.

I hope you are all Safe and Healthy!

Regards,

SMD

Scott M. Denton
Environmental Manager

HollyFrontier Navajo Refining LLC
P.O. Box 159
Artesia, NM 88211-0159
575-746-5487 (o)
970-581-7268 (c)

CONFIDENTIALITY NOTICE: This e-mail, and any attachments, may contain information that is privileged and confidential. If you received this message in error, please advise the sender immediately by reply e-mail and do not retain any paper or electronic copies of this message or any attachments. Unless expressly stated, nothing contained in this message should be construed as a digital or electronic signature or a commitment to a binding agreement.

CONFIDENTIALITY NOTICE: This e-mail, and any attachments, may contain information that is privileged and confidential. If you received this message in error, please advise the sender immediately by reply e-mail and do not retain any paper or electronic copies of this message or any attachments. Unless expressly stated, nothing contained in this message should be construed as a digital or electronic signature or a commitment to a binding agreement.

From: [Chavez, Carl J. EMNRD](#)
To: [Denton, Scott](#); [Wade, Gabriel. EMNRD](#); [Cobrain, Dave. NMENV](#); [Tsinnajinnie, Leona. NMENV](#)
Cc: [Combs, Robert](#); [Leik, Jason](#); [Griswold, Jim. EMNRD](#)
Bcc: [Sandoval, Adrienne. EMNRD](#); [Brancard, Bill. EMNRD](#)
Subject: RE: HFNR Semi-annual GW Monitoring Delay Request
Date: Wednesday, April 8, 2020 10:42:00 AM

Scott, et al.:

Approved.

Thank you.

Mr. Carl J. Chavez, CHMM (#13099)
New Mexico Oil Conservation Division (Albuquerque Office)
Energy Minerals and Natural Resources Department
5200 Oakland Avenue, NE
Albuquerque, New Mexico 87113
Ph. (505) 660-7923
E-mail: CarlJ.Chavez@state.nm.us

“Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?” (To see how, go to: <http://www.emnrd.state.nm.us/OCD> and see “Publications”)

From: Denton, Scott <Scott.Denton@HollyFrontier.com>
Sent: Tuesday, April 7, 2020 4:57 PM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>; Wade, Gabriel, EMNRD <Gabriel.Wade@state.nm.us>; Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>; Tsinnajinnie, Leona, NMENV <Leona.Tsinnajinnie@state.nm.us>
Cc: Denton, Scott <Scott.Denton@HollyFrontier.com>; Combs, Robert <Robert.Combs@HollyFrontier.com>; Leik, Jason <Jason.Leik@HollyFrontier.com>
Subject: [EXT] HFNR Semi-annual GW Monitoring Delay Request

Mr. Carl Chavez
Mr. Gabriel Wade

Mr. Dave Cobrain
Ms. Leona Tsinnajinnie

Request for 60 day delay of Groundwater Sampling at Navajo and Lovington Refineries.

HollyFrontier Navajo Refining (HFNR) conducts groundwater sampling on a semi-annual basis in accordance with the Facility-Wide Groundwater Monitoring Work Plan (FWGMWP) for the Artesia refinery (required by RCRA Permit No. NMD048918817 and OCD Discharge Permit GW-028), and OCD AP-110 for the Lovington refinery. The first sampling event for 2020 is currently scheduled for the week of April 13, 2020 for both facilities.

On March 11, 2020, Governor Michelle Lujan Grisham declared a public health emergency, and through the Department of Health Services has issued several subsequent Public Health Orders. On April 6, 2020, the public health emergency declaration was renewed and extended through April 30, 2020. A Public Health Order issued 3-23-2020 and amended on April 6, 2020 directs all non-essential businesses in New Mexico to close, and for essential businesses in New Mexico to minimize operations and staff to the greatest extent practical. Since this declaration, The Governor has also issued travel restrictions related to air travel for travelers coming to New Mexico from out of state, requiring a 14 day waiting period, and restrictions related to lodging (hotels limited to 25% occupancy beginning April 7). The travel restriction orders do not currently prevent HFNR's contractor from traveling to the site by vehicles(although guidelines suggest that they should self-isolate for 14 days upon entry to New Mexico), but the lodging restrictions may have an impact on the availability of accommodations. It is also possible that additional travel restrictions will be made which would impact our contractor's ability to reach the facility or to return home after the sampling is complete.

Refinery operations are considered to be an essential business as defined in the current Public Health Order. However, the subcontractor that normally performs sampling at the Artesia and Lovington refineries is based in Houston, Texas, and would be sending a team of 9 members to perform sampling at Artesia and Lovington over a 5 day period. HFNR has been weighing manpower options for an acceptable approach to comply with the health orders while meeting the requirements of our RCRA and Discharge Permits. In this evaluation, local contractors and/or HFNR employees would be trained to perform the sampling. HFNR is concerned about the quality of data that would be collected under this approach and how comparable it would be to other monitoring events.

Based on review of historical data, HFNR believes a representative sampling event could be performed by our Houston-based contractor with a 60 day delay without causing any significant data quality impact due to irrigation activities in the region. Any anomalous data obtained or other exceptions to the work plan would be discussed in the Annual Groundwater Monitoring report, as prescribed in the FWGWMP.

In order to minimize threat to worker health and minimize the potential spread of COVID-19 in accordance with New Mexico directives, HFNR hereby requests postponement of the semi-annual sampling events at Artesia and Lovington for a period of 60 days. HFNR will review the circumstances after 45 days, and make a determination then if the sampling can be performed or should be cancelled based on State of New Mexico directives, risk to workers, and hydrogeologic conditions.

In the interim, HFNR will collect groundwater elevation data from the east side of the Artesia refinery, and will continue to operate the groundwater and LNAPL recovery systems using local personnel.

Please don't hesitate to contact me if you have any questions related to this request.

I hope you are all Safe and Healthy!

Regards,

SMD

Scott M. Denton
Environmental Manager

HollyFrontier Navajo Refining LLC
P.O. Box 159
Artesia, NM 88211-0159
575-746-5487 (o)
970-581-7268 (c)

CONFIDENTIALITY NOTICE: This e-mail, and any attachments, may contain information that is privileged and confidential. If you received this message in error, please advise the sender immediately by reply e-mail and do not retain any paper or electronic copies of this message or any attachments. Unless expressly stated, nothing contained in this message should be construed as a digital or electronic signature or a commitment to a binding agreement.