

Count	Well	Within 800 FT of Developed Areas
1	BC 135	Yes
2	BC 172	Yes
3	BC 203	Yes
4	BC 234	Yes
5	BC 236	Yes
6	BC 303	Yes
7	BC 351	Yes
8	BC 551	Yes
9	BC 639	Yes
10	Buckler-Comm 1A	Yes
11	LAI1 106	Yes
12	LAI1 161	Yes
13	LAI1 185	Yes
14	LAI1 250	Yes
15	LAI1 313	Yes
16	LAI1 347	Yes
17	LAI1 368	Yes
18	LAI1-COMM 1	Yes
19	LAI1-STK-LW 4	Yes
20	LAI1-BC 403	Yes
21	STK-BC-LAI1-LW 21	Yes
22	STK-BC 23	Yes
23	STK-LAI1 302	Yes
24	STOCKER 504	Yes
25	TVIC 49	Yes
26	TVIC 67	Yes
27	VIC2 22	Yes
28	VIC1 106	Yes
29	VIC1-LAI1 2	Yes
30	VIC2 20	Yes
31	VICKERS2 24	Yes
32	WRZU 353	Yes
33	VRU 285	Yes
34	LAI1-STK-BC-LW 3	Yes
35	VIC2 23	Yes
36	BC 341	No
37	LAI1 101A	No
38	LAI1 154	No
39	LAI1 188A	No
40	LAI1 199A	No
41	LAI1 315A	No
42	LAI1 340	No
43	LAI1-BC 12	No
44	LAI1-VIC1-LW 11	No
45	TVIC 204	No
46	TVIC 50	No
47	TVIC 58	No
48	VIC1 116	No
49	VIC1 118	No
50	VIC1 83	No
51	VRU-LAI1 204	No
52	WRZU 311	No
53	LAI1 176	No
54	VIC2 28	Yes
55	BC 29	Yes
56	VIC2 33	Yes
57	VIC1 77	No
58	VRU-LAI1 206	No
59	WRZU 352	Yes
60	Rubel 30	No
61	VRU 129	Yes
62	BC 50	No
63	LAI1 151	Yes



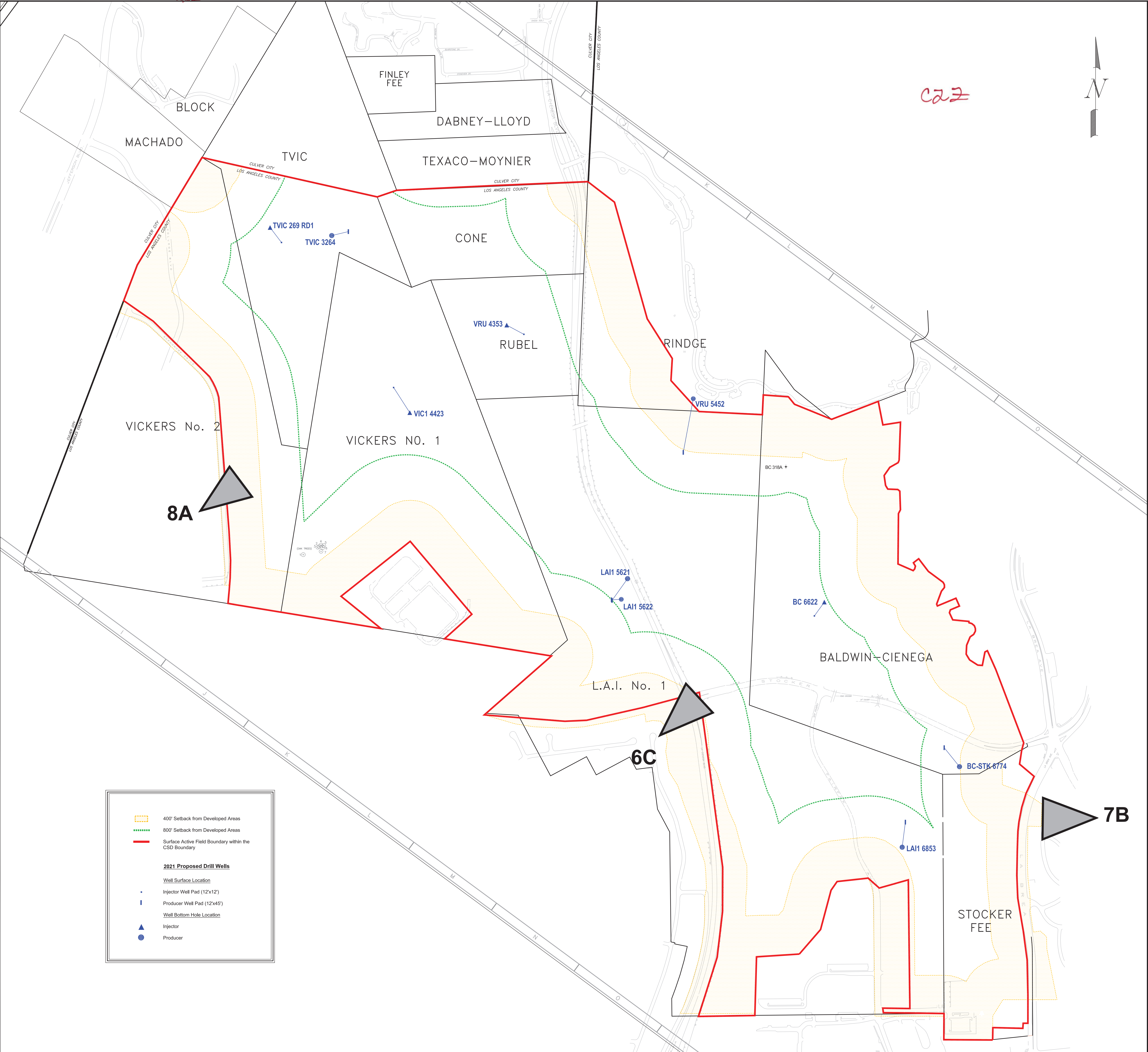
SENTINEL PEAK
RESOURCES

LOS ANGELES COUNTY, CALIFORNIA
INGLEWOOD OIL FIELD

Attachment #2

2021 CSD Plugged and Abandoned Wells
(as of October 30, 2020)

Drawn by: SP Date: 11/4/2020



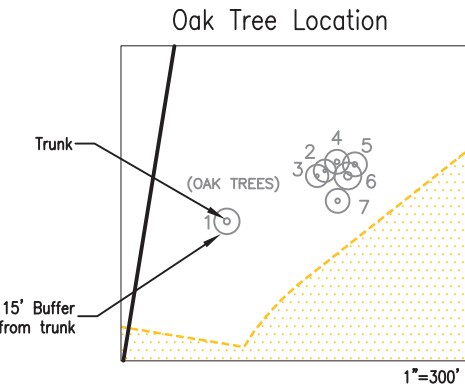
Environmental Assessment Viewshed Analysis

- 7B** View of the Inglewood Oil Field from Windsor Hills
- 6C** View of the Inglewood Oil Field from Ladera Heights
- 8A** View of the Inglewood Oil Field from West Los Angeles College

2021 Drilling & Re-drilling Plan Wells

COUNT	TYPE	WELL NAME
1	PRODUCER	BC-STK-6774
2	INJECTOR	BC 6622
3	INJECTOR	VRU 4353
4	PRODUCER	VRU 5452
5	PRODUCER	LAI1 5621
6	PRODUCER	LAI1 6853
7	PRODUCER	LAI1 5622
8	INJECTOR	TVIC 269RD1
9	PRODUCER	TVIC 3264
10	INJECTOR	VIC1 4423

Oak Tree #	# of Trunks	Cum. DBH
1	1	10.0000
2	1	9.00
3	1	8.40
4	1	7.60
5	1	7.90
6	2	10.10
7	1	7.90



GRAPHIC SCALE



Sentinel Peak Resources
5640 S. Fairfax Ave.
Los Angeles, CA 90056

INGLEWOOD OIL FIELD
LOS ANGELES COUNTY, CALIFORNIA

Attachment #3
2021 Visual Simulation Location Map

SCALE: SEE SCALE BAR
DATE: 10-21-2020 NAD 1927, CA PLANE, ZONE 7

2021 Drilling, Re-drilling, Well Abandonment, and Well Pad Restoration Plan

Inglewood Oil Field

Baldwin Hills Community Services District
Title 22, Section 310.050.Z.3
(formerly Section E.26.c)

November 2020



Sentinel Peak Resources LLC
5640 South Fairfax Avenue
Los Angeles, CA 90056



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1	2021 Drilling, Re-Drilling, and Well Abandonment Map
2	2021 CSD Plugged and Abandoned Wells
3	2021 Visual Simulation Location Map
3.1	View of the Inglewood Oil Field from West Los Angeles College
3.2	View of the Inglewood Oil Field from the Windsor Hills
3.3	View of the Inglewood Oil Field from Ladera Heights



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1 Introduction

1.1 Executive Summary

The Inglewood Oil Field is located along South Fairfax Avenue near Los Angeles, California, covering approximately 880 acres in the Baldwin Hills. Oil production began in 1924. Today, the Inglewood Oil Field is Los Angeles Basin's largest producing oil field, producing approximately 5,200 barrels of oil each day to support California's growing demand for hydrocarbon products.

Sentinel Peak Resources LLC assumed operation of the Inglewood Oil Field on December 30, 2016, employing 80 full-time professionals in support of operations plus an additional 100 to 150 contractors. These people put their talents to work in operating more than 650 active wells plus associated facilities.

The men and women who operate the Inglewood Oil Field share a common mission – to produce oil and gas to meet our domestic needs. This is important when considering that the use of foreign oil in California has increased from 10% in 1996 to 58.4% in 2019¹. With nearly two-thirds of our petroleum being supplied from foreign sources, we cannot ignore the social, environmental, and economic implications of foreign production. Locally produced energy in the form of California oil remains the most advantageous and responsible option. Continued production from the Inglewood Oil Field provides just that.

Each year, the operator of the Inglewood Oil Field is to submit the drilling, re-drilling, well abandonment, and well pad restoration plan for the coming calendar year. The following report is Sentinel Peak Resources plan for 2021.

We are likely not to drill new production wells next year, but include herein the list of ten most likely wells to be drilled in the event that we decide to direct capital toward a drilling program. A summary of planned activities, then, for 2021 is:

Wells to be drilled	9	Unlikely to drill new wells in 2021, but top 10 likely locations included herein should plans change
Re-drills	1	
Abandonments	12	8 of the 12 generate "bonus wells" due to their location
Well pads to be restored	-none-	

Activities other than drilling planned for 2021 include continued upgrades of the storm water runoff facilities which includes retention ponds and filtration systems, resumed activity at the permitted biofarm, and maintenance of our current set of wells and facilities. Construction will also continue on the Park to Playa trail by others.

Please see the following report sections for details on the 2021 drilling plan.

¹ California Energy Commission, Oil Supply Sources to California Refineries, http://www.energy.ca.gov/almanac/petroleum_data/statistics/crude_oil_receipts.html



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1.2 Drilling Plan Requirements

The Baldwin Hills Community Standards District (CSD) was adopted by the Los Angeles County Regional Planning Commission on October 28, 2008 and became effective on November 28, 2008. The CSD governs aspects of the Inglewood Oil Field located in the Baldwin Hills Zoned District. The goal of the CSD is to ensure that oil field operations are conducted in a safe manner and are compatible with the surrounding uses.

The field is operated by Sentinel Peak Resources LLC. In various areas of this document we quote the CSD language and even though the ordinance references "PXP", the operator as of 2008, as successor in interest and current operator of the oil field, Sentinel Peak Resources is now responsible for implementation and adherence to the terms of the CSD.

The CSD requires that, before the end of each calendar year, the operator shall develop and deliver to the Director of Regional Planning, County of Los Angeles, a Drilling, Re-drilling, Well Abandonment, and Well Pad Restoration Plan (hereinafter referred to as the Plan or the Annual Plan or the 2021 Plan or the 2021 Drilling Plan) describing all drilling, re-drilling, well abandonment, and well pad restoration activities that may be conducted during the upcoming calendar year. See **Appendix A** for specific provisions governing these activities.



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2 2021 Plan

2.1 Plan Overview

For 2021, Sentinel Peak Resources is unlikely to drill new wells but identifies herein more likely locations should a drilling program take place. This 2021 plan outlines a plan to drill 9 new wells and 1 re-drill well (see **Attachment 1** for the location of the proposed wells) using 1 drilling rig in accordance with the CSD and Settlement Agreement. The 10 wells are comprised of 6 producers and 4 injectors, of which 1 injector is a re-drill. All would be drilled from existing pads, consequently, no new pads are proposed for 2021. Drilling and re-drilling activities will conform to the setback requirements contained in the CSD, Section 050.B.14 as follows:

Drilling and Re-drilling Setbacks: The following setbacks shall apply within the oil field for drilling and re-drilling:

- i: *At least 400 feet from developed areas*
- ii: *At least 20 feet from any public roadway*

Developed areas are defined in the CSD as "Any lot or parcel of land containing any residential, commercial, industrial, or office structure, or used for residential, commercial, industrial, or office purposes (provided that no lot or parcel of land on the oil field shall be considered to be developed area solely because of the presence thereon of the Cone Trust House or of a structure used by any operator for administrative functions associated with the oil field); or any lot or parcel of land containing any public park, house of worship, cemetery, school, parking lot, or any recreation area which has been developed and opened for public use."

Two types of wells are drilled in the oil field; injection and production wells. *Injection wells* are used to pump fluids into the oil-bearing geologic formation at depth, sweeping the oily water to nearby *production wells* for recovery.

Wells are drilled by erecting temporary well derricks, or drilling rigs and related components, and drilling to total depth. The well is drilled and completed in accordance to regulated conditions specified by the California Geologic Energy Management Division (CalGEM) formerly known as California Division of Oil and Gas and Geothermal Resources (DOGGR). The geologic zones of interest for Sentinel Peak Resources' 2021 Plan range at a subsurface depth of between 1,000 feet and 3,500 feet maximum vertical depth. Note that individual well depths will vary depending on location in the field. Wells in the shallow zones typically take approximately 8 to 10 days to drill and mid-zone wells typically take approximately 12-14 days to drill, including mobilization and demobilization of drilling equipment.

Under the terms of the Settlement Agreement, deep zone wells are defined as wells presently identified as the Nodular Shale and Sentous zones and any other zones approximately 8,000 feet or deeper. Mid zone wells are defined as wells approximately 3,500 – 7,999 feet deep, presently identified as the Rubel, Moynier, Bradna and City of Inglewood zones. Shallow wells are defined as wells approximately 3,500 feet deep and above the zones identified in 1(b) of the Settlement Agreement as mid-zones, which would include the Vickers and Rindge zones and the Investment.

Supplement plans are required for any deep or mid zone wells where the top hole (surface) location is closer than 800' to a "Sensitive Developed Area".

All wells in the 2021 Plan target a shallow zone and one planned producer (VRU 5452) has a surface hole location within 800 feet of a "Sensitive Developed Area" such that the preparation of a Mid-Zone Supplement is not required.



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Based on the uncertainty that any given well will perform as anticipated, Sentinel Peak Resources prepared a plan as discussed in the sections that follow.

A drilling and re-drilling schedule was developed utilizing a single drilling rig on the field.

Planned activities of well abandonment and well pad abandonment and restoration are also listed in **Table 4** and will begin upon approval by the Director.

2.2 Conformity with CSD Plan Requirements

The Maximum Number of Wells Proposed to be Drilled or Re-drilled

It is unlikely that we will drill new wells in 2021, but should conditions change during the year, the 2021 Plan lists the 10 most likely wells that could be drilled. This number is well below any maximum well count stipulated in the CSD and the Settlement Agreement.

Provisions limiting the annual pace of drilling and the cumulative maximum number of wells have changed over time and is summarized as follows:

Time Period	Well Count Provisions
2008 to 2011	Adoption of CSD 30 wells/yr max 600 wells max by 2028
2012 to 2028	Increases to 53 wells/yr max (35 wells plus 18 bonus wells) 500 wells max by 2028

Since inception of the CSD, 127 wells have been drilled and 63 wells have been abandoned; 41 of which were within 800 feet of Developed Areas (see **Table 1** for a cumulative summary of the number of wells drilled by year since inception of the CSD). No wells have yet to be drilled in 2020. Five bonus wells have been used through September 2020, leaving 63 “bonus well” credits to apply towards future drilling activities. Bonus wells can be drilled at any time during the life of the CSD and must be located outside the 800-foot zone.

- Effective July 15, 2011, the Settlement Agreement limits the total number of new wells that will be installed through 2028 to 500. Other provisions that apply:
- Section 4.b. initially limited the number of new wells to 30 per year; once 50 new wells had been installed, that increased to 35 new wells per year (see December 12, 2011 County approval).
- Up to an additional 18 wells per year can be drilled using a system of “bonus credits” generated from abandonment of idle wells located within 800’ of Developed Areas.
- This means that a total of 53 wells combined may be drilled in any given year.

Table 1 - Number of Wells Drilled Since Inception of the CSD

Year	Wells/yr	Bonus Wells Used/yr	Cumulative Total
2009	0	0	0
2010	19	0	19
2011	40	5	64
2012	20	0	84
2013	30	0	114
2014	18	0	132
2015	0	0	132
2016	0	0	132
2017	0	0	132
2018	0	0	132
2019	0	0	132
2020	0	0	132
Total to Date	127	5	132

Wells planned for 2021 are listed in **Tables 2, 3 and 4** and are as follows:

- A. 10 wells
- B. No bonus wells proposed
- C. Twelve wells to be plugged and abandoned, 8 of which are located so as to generate an additional 16 bonus well credits that could be used in future drilling years after approval by the County.

Schedule 1 is the proposed 2021 drilling schedule based on the use of a single drill rig. Though the locations and respective schedule reflect geologic targets based on the best geologic and reservoir data available, new well performance data, rig availability, economic conditions, company plans, and reallocation of budgets may alter the schedule and number of wells drilled in 2021.

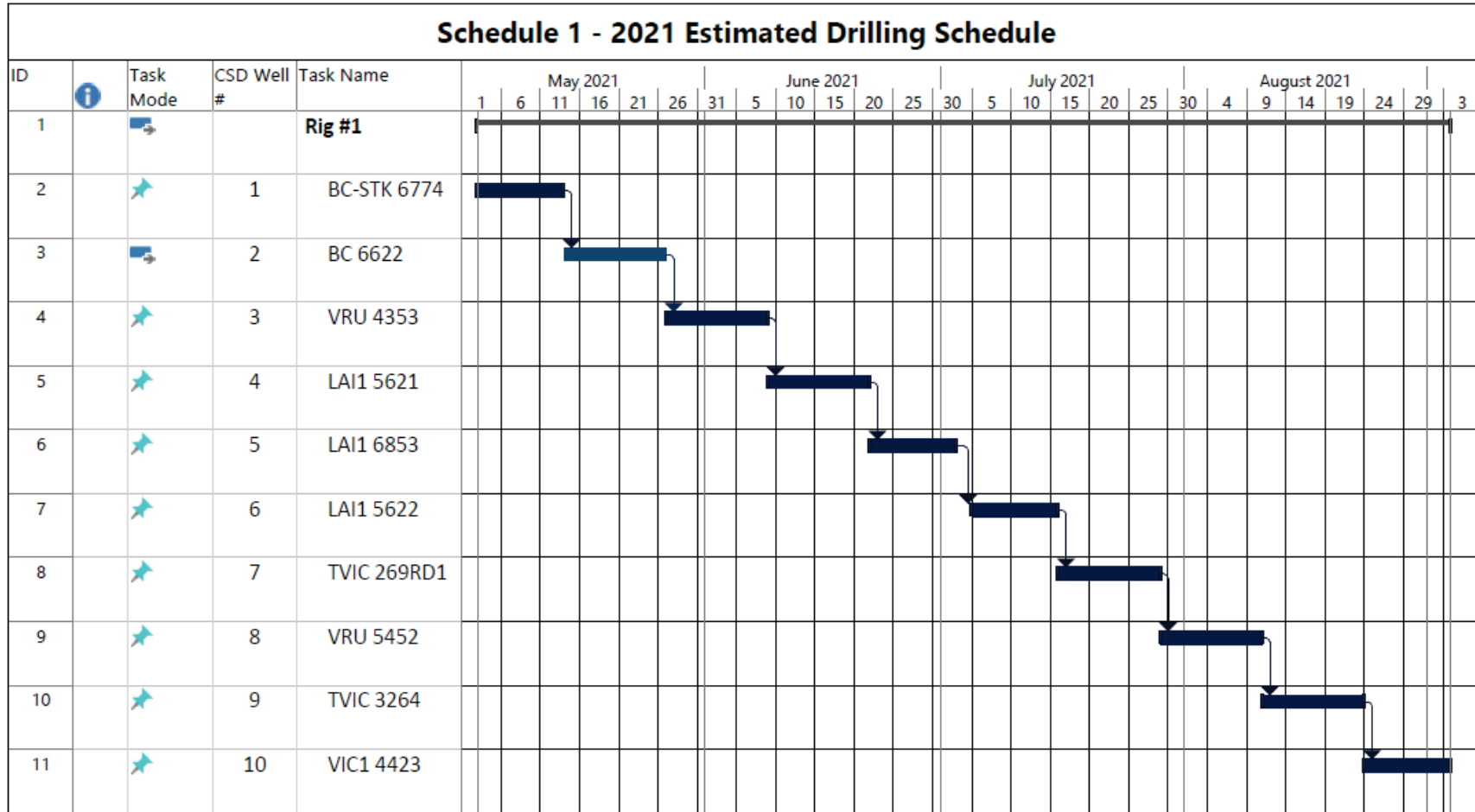
Table 5 catalogues the number of “bonus wells” generated through the abandonment of wells within 800’ of developed areas (“800-foot zone”).

Prior to drilling or re-drilling any wells, Sentinel Peak Resources will submit Notices of Intent to drill to CalGEM and secure CalGEM permits prior to commencing drilling. Los Angeles County Site Plan Review Applications and County Fire Dept also have review and approval roles for individual proposed wells.



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Schedule 1 - 2021 Estimated Drilling Schedule





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Approximate Location of Proposed Wells

Table 2 provides X - Y coordinates for the proposed well locations included in the 2021 Plan, including bottom hole and surface locations. **Attachment 1** illustrates the location of these wells with rectangles drawn to scale to represent the footprints (12' x 45') of conventional surface pumps and identify the surface location candidates projected to be completed as producing wells. Squares drawn to scale on **Attachment 1** represent the footprint (12' x 12') of conventional injection wells and indicate the surface locations of wells proposed to be completed as injectors. The acronym "RD" within a well name reflects a well to be re-drilled.

Geographical location, visual impact, duration of drilling activities, relative distance to developed areas and other factors were the criteria used to avoid temporary overconcentration of drilling activities near any one developed area. Duration of drilling activities includes the mobilization of drilling rig equipment, actual drilling operations and demobilization of drilling equipment, as depicted in **Schedule 1**.

The entire field was reviewed for temporary overconcentration of drilling activities near developed areas including, without limitation, the surrounding parklands and recreational areas including:

- Kenneth Hahn State Recreational Area
- Culver City Park
- Ladera Park
- Baldwin Hills Sports Complex
- Windsor Hills
- Ladera Heights
- Blair Hills
- Raintree Apartments
- Culver Crest
- West LA College

None of these areas would see the drilling of multiple wells in proximity to developed areas except for wells near Windsor Hills.

Production Zones Proposed for Development

The wells proposed in the 2021 Plan will be used to develop the Vickers-Rindge production zone within the Inglewood Oil Field (see **Table 2**).



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Table 2 – Proposed Year 2021 Drilling Plan

Count	Well Name	TYPE	Bottom Hole Locations (NAD27, Zone 7)		Surface Locations (NAD27, Zone 7)		Estimated Total Vertical Depth @ Target Depth	Potential Target Production Zones	SHL Within 800' of Sensitive Developed Area	Supplement Required	Qualify to be Drilled as Bonus Well
			X (Easting)	Y (Northing)	X (Easting)	Y (Northing)					
1	BC-STK 6774	Producer	4,178,608.00	4,111,050.00	4,178,458.93	4,111,234.80	2,600	VR	No	No	No
2	BC 6622	Injector	4,177,292.00	4,112,652.00	4,177,195.03	4,112,517.43	2,500	VR	No	No	No
3	VRU 4353	Injector	4,174,200.00	4,115,348.00	4,174,367.08	4,115,258.68	3,300	VR	No	No	Yes
4	LAI1 5621	Producer	4,175,376.00	4,112,880.00	4,175,225.24	4,112,668.54	3,100	VR	No	No	Yes
5	LAI1 6853	Producer	4,178,050.00	4,110,266.00	4,178,080.98	4,110,509.95	3,300	VR	No	No	No
6	LAI1 5622	Producer	4,175,316.00	4,112,680.00	4,175,219.96	4,112,674.10	3,000	VR	No	No	Yes
7	TVIC 269RD1	Injector	4,171,896.00	4,116,298.00	4,172,007.10	4,116,152.50	3,220	VR	No	No	No
8	VRU 5452	Producer	4,176,016.00	4,114,632.00	4,175,918.58	4,114,109.62	3,300	VR	Yes	No	No
9	TVIC 3264	Producer	4,172,496.00	4,116,220.00	4,172,657.94	4,116,258.44	3,500	VR	No	No	No
10	VIC1 4423	Injector	4,173,256.00	4,114,496.00	4,173,098.68	4,114,740.72	3,200	VR	No	No	Yes

Note: NAD 27 (North American Datum) coordinates displayed in feet.



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The Vickers-Rindge wells have been designed to produce from multiple production zones, which means they are drilled as vertically as possible through the entire Vickers-Rindge interval. This serves to limit the number of new wells needed by maximizing production from each well. If each well was only designed to produce from one of the production zones then more wells would be needed to obtain the same level of production.

Approximate Location and Size of New Well Pads

There are no new drilling pads proposed for construction in the 2021 Plan.

Estimated Target Depth and Bottom Hole Locations of Proposed Wells

Refer to **Attachment 1 and Table 2** for this information.

Maximizing Use of Existing Wells Pads, Use of Re-drilled Wells, Well Consolidation

To maximize the use of existing pads, the target production zones and bottom hole locations for each well was first identified. From that target location, a projected maximum horizontal reach radius was considered. The result is the identification of suitable surface locations from which drilling could commence and priority is given to drilling from available existing pads.

Placing an idle well back into operations involves re-drilling and is preferred to drilling an altogether new well. **Table 3** identifies idle wells evaluated as potential re-drill candidates.

The criteria evaluated to identify the suitability of an idle well for a re-drill candidate were as follows:

1. **Horizontal Reach:** The horizontal reach of a well is limited by the shallowest target production zone for each well, and the fact that the wells need to be completed vertically through the target production zones to maximize the effectiveness of the well:

Target Production Zone	Max Horizontal Reach Radius from Surface
Vickers-Rindge	300'
Moynier	1,800'

2. **CalGEM Field Rules:** CalGEM 2007 Field Rules for Inglewood require that the production casing be cemented back to surface. For a producing well, the required casing in the perforated section must be 9 5/8", with a corresponding 13 3/8" casing at surface. For a re-drill injector, the minimum production casing size at the injection interval is 7" with a corresponding minimum casing size at surface of 9 5/8";



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3. **Well Orientation:** The existing orientation (inclination and deviation direction) of the idle well may preclude its use because it may be impossible for the drill bit to follow a path to the intended target;
4. **Casing Integrity:** The re-drill candidate must have excellent casing integrity; the casing cannot be damaged;
5. **Lease Offset Obligations:** The use of an idle well can trigger an offset well obligation according to the provisions of an adjacent lease. An "offset obligation" requires a second and adjacent well to be drilled on the adjacent lease to protect that lessor from drainage. In this case, the idle well would be rejected to minimize new wells and maximize consolidation and efficiency;
6. **Economics:** In some cases, it is more economically feasible to drill a new well rather than re-drill an existing idle well. Idle wells with potential mechanical integrity issues could experience problems during the re-drilling process, rendering the well uneconomical or dramatically increasing the drilling time associated with the well;
7. **Effect on Other Wells:** The path or route of the well to be drilled from the idle well candidate must navigate around existing production and injection wells. It may be technically or economically unfeasible to reach the target location if these obstructions cannot be avoided.

One well is proposed for re-drilling in the 2021 Plan and it meets the criteria listed above. All proposed surface well locations were consolidated to the maximum extent possible.



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Table 3 –Idle Wells as Possible Re-Drill Candidates²

No.	Proposed Well	Type	Idle Well(s) within 300 feet (Vickers Rindge) or 1,800 feet for (Rubel-Moynier)	Possible Re-drill Candidate?	Comments
1	BC-STK 6774	Producer	N/A		
2	BC 6622	Injector	N/A		
3	VRU 4353	Injector	N/A		
4	LAI1 5621	Producer	N/A		
5	LAI1 6853	Producer	LAI1 287	N	LAI1 287 RTP and the 7" casing diameter too small
6	LAI1 5622	Producer	N/A		
7	TVIC 269RD1	Injector	Re-drill Injector	Y	Proposed for re-drill in the 2018 Drilling Plan
8	VRU 5452	Producer	LAI1-VRU 2	N	7" casing diameter too small
9	TVIC 3264	Producer	TVIC 61	N	7" casing diameter too small
10	VIC1 4423	Injector	N/A		

*Note: "N/A" in above table 3 means no offset idle well within 300 feet from proposed Vickers Rindge wells or within 1,800 feet of proposed Moynier wells.
"RTP" means return to production.*

² Idled wells within 800' of "Sensitive Developed Areas" were not evaluated.



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Proposed Well Abandonments and Wells for “Bonus Well” Eligibility

Well abandonment is defined in the CSD as *“the permanent plugging of a well, in accordance with state law as set forth in Division 3, Chapter 1 of the California Public Resources Code and pursuant to requirements of CalGEM, found in Title 14 of the California Code of Regulations, sections 1723-1723.9, or in accordance with subsequently enacted applicable state laws or regulations regarding well abandonment.”*

In addition to the plugging and abandonment requirements within the CSD, there are other factors that contribute to the determination for the permanent plugging of a well. Oil field economics and the integrity of a well bore dictate a well viable for future production/injection. Marginally productive wells requiring costly repair work may be deemed uneconomic and may be considered for plugging and abandonment.

Table 4 lists proposed wells to be plugged and abandoned in 2021. These are illustrated in **Attachment 1**. Eight of the twelve wells are within 800’ of the developed areas and would qualify as “bonus wells.” Additional abandonments deemed appropriate by CalGEM / Sentinel Peak Resources are possible throughout the year. Abandonment operations will be conducted in accordance with current CalGEM regulations and rules specified under Section 10 of the Settlement Agreement and other applicable regulations.

Sections 4.c. – d. of the Settlement Agreement provide a process for the operator to generate “bonus wells” that allow additional drilling in each calendar year. “Bonus wells” generated under the Settlement Agreement are tied to well abandonments that occur within 800’ of developed areas. See **Table 5** for a cumulative list of wells plugged and abandoned since inception of the CSD, including those that qualify for “bonus wells”. These are illustrated in **Attachment 2**.



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Table 4 - 2021 Proposed Well Abandonment Locations

Master Well Name	API Number	Surface Location NAD27 X (East)	Surface Location NAD27 Y (North)	Within 800' of Developed Area?	Estimated Abandonment Start Date
BC 332	037-07753	4,177,715	4,112,056	No	03/01/20
BC 442	037-07766	4,178,151	4,111,380	No	03/15/20
BC 318B	037-00203	4,176,918	4,113,970	Yes	04/01/20
VIC2 30	037-08768	4,171,164	4,115,455	Yes	04/15/20
VIC2 32	037-08769	4,171,298	4,115,087	Yes	05/01/20
VIC2 36	037-20173	4,170,783	4,115,598	Yes	05/15/20
VIC2 35	037-20190	4,170,783	4,115,600	Yes	06/01/20
VIC1 49	037-08678	4,172,846	4,115,714	No	06/15/20
VIC1 120	037-20386	4,173,253	4,114,969	No	07/01/20
VIC2 14RD	037-08753	4,171,257	4,116,581	Yes	07/15/20
VIC2 16	037-08755	4,171,353	4,116,303	Yes	08/01/20
VIC2 21	037-08760	4,171,494	4,115,694	Yes	08/15/20

Note: NAD 27 (North American Datum) coordinates displayed in feet.

Table 5 – Cumulative Status Summary – Wells Plugged and Abandoned as of September 2020

Well Name	Type	NAD27 X (East)	NAD27 Y (North)	W/IN 800'	Bonus Wells Earned	Bonus Wells Used	Year Plugged & Abandoned
LAI1 101A	Oil	4,175,753	4,112,494	No	0	0	2009
LAI1 250	Oil	4,176,455	4,111,503	Yes	2	2	2009



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Table 5 – Cumulative Status Summary – Wells Plugged and Abandoned as of September 2020

Well Name	Type	NAD27 X (East)	NAD27 Y (North)	W/IN 800'	Bonus Wells Earned	Bonus Wells Used	Year Plugged & Abandoned
VIC2 20	Oil	4,170,919	4,116,259	Yes	2	2	2009
WRZU 311	Oil	4,174,705	4,114,901	No	0	0	2009
WRZU 353	Oil	4,175,731	4,113,960	Yes	2	1	2009
BC 341	Oil	4,177,788	4,111,518	No	0	0	2009
TVIC 49	Oil	4,171,701	4,116,510	Yes	2	0	2009
TVIC 204	Injector	4,171,677	4,115,684	No	0	0	2009
VIC1 83	Oil	4,172,476	4,110,868	No	0	0	2009
VIC 2 22	Oil	4,171,276	4,115,079	Yes	2	0	2010
STK-BC-LAI1 LW 21	Oil	4,178,474	4,110,856	Yes	2	0	2009
Buckler-Comm 1A	Oil	4,178,825	4,108,751	Yes	2	0	2010
LAI1-BC 12	Oil	4,176,442	4,113,352	No	0	0	2011
TVIC 58	Oil	4,172,435	4,115,797	No	0	0	2011
LAI1-STK 4	Oil	4,178,286	4,110,732	Yes	2	0	2011
Vickers2 24	Injector	4,171,591	4,114,692	Yes	2	0	2011
TVIC 50	Oil	4,172,930	4,116,040	No	0	0	2012
VIC1 106	Oil	4,173,881	4,112,954	Yes	2	0	2012
BC172	Oil	4,179,065	4,111,666	Yes	2	0	2012
TVIC 67	Oil	4,172,123	4,114,713	Yes	2	0	2012
LAI1 347	Injector	4,178,347	4,110,542	Yes	2	0	2013



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Table 5 – Cumulative Status Summary – Wells Plugged and Abandoned as of September 2020

Well Name	Type	NAD27 X (East)	NAD27 Y (North)	W/IN 800'	Bonus Wells Earned	Bonus Wells Used	Year Plugged & Abandoned
LAI1 340	Oil	4,175,679	4,113,534	No	0	0	2013
BC 135	Injector	4,177,746	4,113,300	Yes	2	0	2013
BC 203	Injector	4,177,709	4,112,519	Yes	2	0	2013
BC 234	Injector	4,177,828	4,112,646	Yes	2	0	2013
BC 236	Injector	4,177,628	4,113,628	Yes	2	0	2013
BC 303	Injector	4,178,090	4,111,981	Yes	2	0	2013
STOCKER 504	Injector	4,179,074	4,110,386	Yes	2	0	2013
LAI1 313	Injector	4,175,407	4,112,353	Yes	2	0	2014
LAI1 315A	Oil	4,175,803	4,112,432	No	0	0	2014
LAI1 188A	Injector	4,175,332	4,113,592	No	0	0	2014
LAI1VIC1-LW 11	Oil	4,174,100	4,114,381	No	0	0	2014
VRU-LAI1 204	Injector	4,171,915	4,114,515	No	0	0	2014
LAI1 154	Oil	4,176,980	4,111,080	No	0	0	2015
BC 639	Oil	4,178,422	4,111,611	Yes	2	0	2015
LAI1 161	Oil	4,177,368	4,110,259	Yes	2	0	2015
LAI1 185	Oil	4,175,709	4,113,926	Yes	2	0	2015
LAI1 368	Oil	4,175,901	4,114,160	Yes	2	0	2015
LAI1-BC 403	Oil	4,176,492	4,114,289	Yes	2	0	2015
STK-LAI1 302	Injector	4,178,561	4,110,070	Yes	2	0	2015



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Table 5 – Cumulative Status Summary – Wells Plugged and Abandoned as of September 2020

Well Name	Type	NAD27 X (East)	NAD27 Y (North)	W/IN 800'	Bonus Wells Earned	Bonus Wells Used	Year Plugged & Abandoned
VIC1 116	Oil	4,172,952	4,115,452	No	0	0	2015
VIC1 118	Oil	4,173,201	4,115,062	No	0	0	2015
VIC1-LAI1 2	Injector	4,174,561	4,112,481	Yes	2	0	2015
BC 351	Oil	4,178,337	4,111,315	Yes	2	0	2016
BC 551	Oil	4,178,426	4,111,273	Yes	2	0	2016
LAI1 106	Oil	4,177,981	4,110,656	Yes	2	0	2016
LAI1 199A	Oil	4,176,354	4,113,092	No	0	0	2016
LAI1-COMM 1	Oil	4,178,320	4,110,868	Yes	2	0	2016
STK-BC 23	Injector	4,178,887	4,111,015	Yes	2	0	2016
LAI1 176	Oil	4,176,497	4,113,602	No	0	0	2016
VRU 285	Oil	4,174,083	4,116,582	Yes	2	0	2016
LAI1-STK-BC 3	Oil	4,178,301	4,110,836	Yes	0*	0	2018
VIC2 23	Oil	4,170,770	4,115,678	Yes	2	0	2018
VIC2 28	Oil	4,171,003	4,115,914	Yes	0*	0	2019
BC 29	Oil	4,177,672	4,114,035	Yes	0*	0	2019
VIC2 33	Oil	4,170,752	4,115,676	Yes	0*	0	2019
VIC1 77	Oil	4,172,424	4,114,640	No	0	0	2019
VRU LAI1 206	Oil	4,174,159	4,114,559	No	0	0	2019
WRZU 352	Oil	4,175,915	4,114,125	Yes	0*	0	2019



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Table 5 – Cumulative Status Summary – Wells Plugged and Abandoned as of September 2020

Well Name	Type	NAD27 X (East)	NAD27 Y (North)	W/IN 800'	Bonus Wells Earned	Bonus Wells Used	Year Plugged & Abandoned
Rubel 30	Oil	4,174,569	4,115,517	No	0	0	2019
VRU 129	Oil	4,173,722	4,116,539	Yes	0*	0	2020
BC 50	Oil	4,178,105	4,111,396	No	0	0	2020
LA11 151	Oil	4,176,731	4,109,730	Yes	0*	0	2020
Totals as of 9/30/2020				41	68	5	

Note: NAD 27 (North American Datum) coordinates displayed in feet.

**Bonus well credit will be submitted upon receipt of Report of Well Abandonment (OG159) from CalGEM.*



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Well Pads Proposed to be Abandoned and Restored

For a well pad to be a candidate for abandonment and restoration, it must meet three criteria:

- First there must be no active wells on the pad;
- Second, there must be no idle wells on the pad that could be future candidates for re-drilling or reworking; and
- Third, the pad would not be useful in the future for potential new wells.

A survey of the existing pads found that none of the pads met these three criteria, so no pads are proposed for abandonment and restoration in the 2021 plan.

To maximize future consolidation, minimize future grading and soil disturbance, and avoid encroachment on undisturbed areas, our goal is to consolidate new wells onto existing pads whenever possible. Well pad abandonment candidates are therefore very rare. In addition, due to Southern California's dry climatic conditions and concern about fire safety, Sentinel Peak Resources endeavors to maintain buffer zones between equipment and trees and undergrowth.

Schedule of Proposed Activities

The planned drilling and re-drilling period for 2021, following Plan approval by Los Angeles County, commences on approximately January 1, 2021, through approximately December 31, 2021. Refer to **Schedule 1**.

Well plugging and abandonment activities will occur over the course of the year after securing necessary approvals and permits.

Equipment and Techniques to Reduce Environmental Impacts

Well drilling and re-drilling involves mobilization of specialized equipment such that once drilling commences, it remains operational around-the-clock until work is complete. A highly technical process, it can be succinctly described as the drilling rig itself supported by a drilling crew, cuttings / drilling mud recirculation and handling, placement of casing and equipment, and cement. The drilling process is logged and closely monitored as work proceeds.

Environmental impacts of drilling include site disturbance for rig access and pad grading, potential for emissions of pollutants, visual impacts, noise, and potential for an uncontrolled release of gas or fluids.

The CSD, the Settlement Agreement, and our own operational standards call for consideration of reducing the environmental impacts of drilling and re-drilling. Approaches to be taken during the 2021 drilling program are:

Site Disturbance – Sentinel Peak Resources will minimize earthwork by using existing access roads and well pads to the fullest extent possible. Siting wells in this manner also minimizes impact to vegetation, lessening concerns about storm water runoff/erosion during the rainy season and dust control in drier conditions. See **Attachment 1** for the planned location of 2021 wells.

Emission of Pollutants – The potential for liquid waste to spill during drilling operations is minimized by creating a containment berm around active drilling operations and by mud handling by means of catch trays. Airborne pollutants are minimized through these techniques:



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1. A gas buster and portable flare, approved by the South Coast Air Quality Management District will be available for immediate use to remove any gas encountered during drilling operations from drilling mud as it is sent to the shaker table, and to redirect such gas to the portable flare for combustion.
2. An odor suppressant spray system will be used on the mud shaker tables during drilling and re-drilling operations to minimize any potential odors.
3. Drilling and re-drilling rigs shall utilize CARB/EPA Certified Tier II or better diesel engines to help reduce NO_x emissions and heavy-duty diesel catalysts to help reduce hydrocarbons and particulate matter, thus meeting or exceeding CSD drill rig engine requirements.
4. Off-road diesel construction equipment engines will utilize Tier III or better diesel engines plus Level 3 CARB verified diesel catalysts designed to reduce NO_x, hydrocarbon and particulate matter emissions.

Visual Impact and Noise - The following setbacks apply within the oil field for drilling and re-drilling activities:

- a. At least 400 feet from developed areas
- b. At least 20 feet from any public road

All drilling and re-drilling in the oil field between the hours of 6:00 PM and 8:00 AM will conform to the Quiet Mode Drilling Plan and Section 2 of the Settlement Agreement. The Quiet Mode Drilling Plan minimizes potential noise impacts and includes the following mitigation measures:

- V-doors to be covered with rubber matting, and is to stay in place when handling pipe.
- Rig floor to be covered with rubber matting or wood.
- Pipe racks and catwalks to be covered with rubber matting or as pipe is being rolled off the pipe racks onto the catwalk.
- Use of hydraulic tongs, instead of chain or pneumatic tongs.
- Hammer wrenches to be wrapped with rags.
- Maintain a sound barrier on the derrick at the "monkey board" and soundproofing blankets around draw-works, rig floor, mud pumps and substructure.
- Install temporary sound wall at the perimeter of the drill pad between the rig and sensitive receptors.
- Minimize banging of pipe on the catwalk by careful use of the forklift.
- Disable audible mobile equipment and truck backup alarms. Other technology that has been considered as part of the 2021 Plan is discussed below.

Electric Drilling Rigs – Emissions-controlled CARB/EPA Certified Tier II or better diesel engines to help reduce NO_x emissions and heavy-duty diesel catalyst diesel driven drill rigs are the predominant type of drill rig in operation in California today. Such rigs are familiar to crews, lending to overall safety, are equipped with a self-contained means of power generation contributing to reliability, and are available from numerous licensed contractors. By contrast, the use of electric drill rigs is identified as a potential "clean technology" to be considered at the Inglewood Oil Field.

Electric drill rigs, where available, require 3.5 – 4.5 MVA of power which is roughly equivalent to the power demand of 4,600 – 5,900 homes. A rig consuming this amount of power would be a significant spot load on the oil field's power grid. The majority of the field is not wired to support spot loads of this extent. What this means is that powering up to safely support electric drill rigs throughout the



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field while energizing existing equipment that is now in operation would in itself represent a significant power system expansion. Doing so could plausibly double the electrical distribution infrastructure necessary to serve the field – an undertaking that is not without safety concerns or environmental impacts of its own. The visual impact alone of such an upgrade would be significant and permanent.

Note, too, that the electrical loads associated with electric drill rigs would have to be supported by the PUC-regulated PG&E delivery system. Consultation with service planning is needed to determine the extent of power delivery upgrades needed to support the added loads associated with electric rigs.

Another approach to generating the electrical power needed for electric rigs may be to operate Compressed Natural Gas or Liquid Natural Gas generators in the field. It is unlikely that such an arrangement would have significantly lower emissions than portable drill rigs equipped with CARB/EPA Certified Tier II or better diesel engines.

Electric rigs occupy larger footprints than conventional rigs, requiring additional grading and in some areas fewer wells per pad. This additional disturbance runs counter to other CSD mitigation measures.

For these reasons, electric drill rigs are not feasible or advantageous at the Inglewood Oil Field. Diesel driven drill rigs equipped with CARB/EPA Certified Tier II or better diesel engines remain the preferred means of safely drilling in an environmentally responsible fashion.

Coil Tubing Drilling Rigs – Some operators use coil tubing drilling rig technology; however, such rigs are limited to slim-hole, 6 1/2" and smaller bit size with drilling operations and through tubing limited to 4 1/2". The casing exits are typically limited to 7 5/8" and smaller. Inglewood Oil Field wells require much larger 17 1/2" holes with 13 3/8" surface casings, and 12 1/4" hole with 9 5/8" production casings. Furthermore, the ratio of hole size to coiled tubing outer diameter ranges from 6:1 to 5:1; thus, removal of cuttings from well bores would be dramatically constrained due to significant reduction of annular drilling fluid velocity. Additionally, a well drilled with coil tubing still requires a rig (slightly smaller than a drilling rig) to run and cement casing strings after drilling operations are complete. For these reasons, coil tubing drilling rig technology at Inglewood remains infeasible.

Diesel – Electric Drilling Rigs - The general specifications for this type of hybrid rig are as follows: Depth Rating – 10,000'; Mast Height – 135'; Rig Floor Height – 14'; Power Generation – 2 diesel engines and 3 electric motors rated at a total of 5400 hp; and Well Pad Size Requirement – 360' x 165'.

Diesel-electric rigs are taller (135' vs. 103'), leading to a greater visual impact during drilling, and occupy a footprint that is 2.4 times larger than what is required for a conventional rig.

Due to the larger footprint and mast height, diesel-electric rigs would create more impacts in the area of visual impacts and site disturbance.

Diesel-electric rigs use similar Tier II engines as a conventional rig rated at 5,400 hp. Sentinel Peak Resources' conventional rig has a total diesel horsepower rating of 3,200. So, while the air emission factors would be the same for both types of rigs on a pounds-per-hour basis, the use of diesel-electric rigs would not result in any air quality benefits over a conventional rig.

Natural Gas – Electric Drilling Rigs - The general specifications for this type of rig are as follows: Depth Rating – 15,000'; Mast Height – 146'; Rig Floor Height – 24'6"; Power Generation – 3 natural gas engines and 5 electric motors rated at a total of 9500 hp; and Well Pad Size Requirement – 315' x 122'.



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The natural gas-electric rig is rated to drill to deeper depths than the conventional diesel-mechanical rigs typically used by Sentinel Peak Resources (15,000' vs. 12,000'). Because the natural gas-electric rig can drill deeper, it is larger in size than the conventional rigs, occupying a footprint that is 1.5 times larger. Air emissions benefits gained by using the natural gas- electric rig are negligible as compared to using the conventional rigs when the CSD mandated mitigation and control technologies are implemented.

The drilling emissions associated with the previous operators rig had daily emissions of 0.34 lbs. VOCs, 11.5 lbs. of CO, 76.9 lbs. of NO_x, and 0.15 lbs. of PM₁₀. A similar sized natural gas rig would be expected to have higher daily VOC and NO_x emissions, but slightly less daily PM₁₀ emissions. As such, the air emissions benefits gained by using the natural gas- electric rig are negligible as compared to using the conventional rigs when the CSD mandated mitigation and control technologies are implemented.

Due to the larger footprint and mast height (146' vs. 103'), natural gas-electric rigs would create more impacts in the area of visual impacts and site disturbance.

The prior operator surveyed eight California drilling companies and identified only one natural gas-powered rig that is permitted and available for California operations. The drilling rig at that time was under long term contract to Southern California Gas Company.

Because of these factors, Sentinel Peak Resources does not propose the use of natural gas-electric rigs in 2021.

Visual Impact of Proposed Wells

Prior annual drilling plans included topographic vertical profile data; however, the September 2015 Periodic Review concluded the information not necessary for subsequent annual submittals.

Potential visual impacts are depicted using baseline oil field photographs taken from receptor locations identified during the CEQA analysis associated with the 2008 CSD. The baseline photographs reflect conditions as of June 2012 and were retaken in 2017. The selected vantage points are listed below along with the corresponding photos contained in the CEQA analysis document.

- Ladera Heights (6C) (Attachment 3.1)
- Windsor Hills (7B) (Attachment 3.2)
- West LA College (8A) (Attachment 3.3)

* * *

That concludes the 2021 Drilling, Re-drilling, Well Abandonment, and Well Pad Restoration Plan for the Inglewood Oil Field. Appendix materials and attachments follow.

Appendix A

Specifically, section 050.Z.3 (formerly section E.26.c) of the Baldwin Hills Community Standard District states the following:

Drilling, Re-drilling, and Reworking Operations. The operator shall comply with all of the following provisions:

c. Annual Drilling, Re-drilling, Well Abandonment, and Well Pad Restoration Plan. Before the end of each calendar year, the operator shall develop and deliver to the director an annual drilling, re-drilling, well abandonment, and well pad restoration plan that shall describe all drilling, re-drilling, well abandonment, and well pad restoration activities that may be conducted during the upcoming calendar year. Drilling and re-drilling shall be scheduled to avoid over concentration of such activities in that year in any one area if located near a developed area. The operator may at any time submit to the director proposed amendments to the then current annual plan. No drilling, re-drilling, or abandonment activity may be commenced unless it is described in a current annual plan (or amendment thereto) which has been approved by the director. The Annual Plan (and any amendments) shall be provided to the CAP (Community Advisory Panel) for review and comment. All comments on the annual plan from the CAP shall be submitted to the director in writing, and, if timely submitted, will be considered as part of the director's review and approval. The director shall complete the review of the annual plan (and any amendments) within 45 days of receipt, and shall either approve the annual plan or provide the operator with a list of deficiencies. The annual plan shall comply with the provisions of this subsection, and shall include the following:

- i. The maximum number of wells proposed to be drilled or re-drilled;*
- ii. Approximate location of all wells proposed to be drilled or re-drilled;*
- iii. Approximate location of all proposed new well pads, including their size and dimensions;*
- iv. Estimated target depth of all proposed wells and their estimated bottom hole locations;*
- v. A discussion of the steps that have been taken to maximize use of existing well pads, maximize use of re-drilled wells, and maximize the consolidation of wells;*
- vi. Location of all proposed well abandonments, if known, in accordance with DOGGR (California Division of Oil and Gas and Geothermal Resources) integrity testing program of idle wells;*
- vii. Location of all well pads proposed to be abandoned and restored;*
- viii. A proposed schedule and phasing of the drilling, re-drilling, well abandonment, well pad abandonment, and restoration activities;*
- ix. A discussion of the latest equipment and techniques that are proposed for use as part of the drilling and re-drilling program to reduce environmental impacts; and*
- x. A topographic vertical profile showing proposed location of new wells that reflects local terrain conditions and that addresses the potential visibility of existing and proposed well and other production facilities from residential and recreation areas.*

On July 15, 2011, a predecessor company and Los Angeles County entered into a Settlement Agreement and Mutual Release with Community Health Councils, Inc., Natural Resources Defense Council, Mark Salkin, City of Culver City, Concerned Citizens of South Central Los Angeles, and Citizen's Coalition for a Safe Community relative to a series of lawsuits that had been filed against

the County's adoption of the CSD in 2008. Sections 1, 2, 3, 4, 6, and 10 of the Settlement Agreement pertain directly to the preparation and implementation of the Annual Plan.

With regards to Section 4 (b) of the Settlement Agreement, FM O&G's predecessor made a request on October 10, 2011 that the Director of Los Angeles County Department of Regional Planning allow an increase of the number of wells that may be drilled or re-drilled annually from 30 to 35 wells. On December 12, 2011 the Director of Los Angeles County Department of Regional Planning concluded that the CSD has been effective in protecting the health, safety and general welfare of the public and authorized the drilling or re-drilling of up to 35 wells per calendar year.

The relevant verbatim excerpts follow below:

Section 1: Slant Drilling

- a. *Deep Zone Wells. Pursuant to the CSD, PXP is required to develop and submit to the County an annual drilling, re-drilling, well abandonment and well pad restoration plan (hereinafter "Annual Drilling Plan"). For any and each well that FM O&G proposes to drill where the Top Hole (as defined in paragraph 1.e below) is closer than 800 feet to a Sensitive Developed Area (as defined in paragraph 1.e below) and the Bottom Hole (as defined in Paragraph 1.e below) is located in any deep zone (presently identified as the Nodular Shale and Sensitive zones and any other zones approximately 8,000 feet or deeper), as a supplement to its Annual Drilling Plan ("Deep Zone Supplement"), PXP will provide a study of the technical feasibility and commercial reasonability of Slant Drilling (as defined in paragraph 1.e below) each of the new deep zone wells in order to locate the Top Hole of any such well away from any Sensitive Developed Area in order to further mitigate potential impacts to such Areas. The Deep Zone Supplement will be reviewed by the County and County-retained expert or experts as part of the County's review of the Annual Drilling Plan. This study will provide a narrative to justify the proposed surface location and shall provide sufficient detail to allow the County to review the extent to which it may be technically feasible and commercially reasonable to locate the Top Hole away from Sensitive Developed Areas in order to further mitigate potential impacts to such Areas and still reach the targeted Bottom Hole location. PXP shall provide to the County any additional information as may be reasonably requested by the County or its expert which is necessary to complete its review. If such information is considered proprietary, the County and its expert will enter into a confidentiality agreement with PXP to protect such information. The narrative will be reviewed by the Director of Regional Planning prior to the approval of the Deep Zone Supplement. If approved by the Director, PXP will Slant Drill in order to locate the Top Hole away from Sensitive Developed Areas consistent with the narrative prepared by PXP that justifies the surface location.*
- b. *Mid-Zone Wells. For wells where the Top Hole is closer than 800 feet to a Sensitive Developed Area and the Bottom Hole is located in a mid-zone (approximately 3,500 to 7,999 feet deep, presently identified as the Rubel, Moynier, Bradna and City of Inglewood zones), PXP shall document such locations in a supplement to the Annual Drilling Plan ("Mid-Zone Supplement"). PXP shall use commercially reasonable efforts to locate new mid-zone wells and well pads away from Sensitive Developed Areas in order to further mitigate impacts to such Areas. The Mid-Zone Supplement shall explain why it is not technically feasible and commercially reasonable to locate the Top Hole away from Sensitive Developed Areas in order to further mitigate impacts to such Areas. The referenced mid-zone well pad assessment will be reviewed by County-retained experts and the County. PXP shall provide to the County any additional information as may be reasonably requested by the County or its expert which is necessary to complete its review. If such information is considered proprietary, the County and its expert will enter into a confidentiality agreement with PXP to protect such information. The County shall approve the mid-zone well locations as part of its review of the Mid-Zone Supplement if consistent with this paragraph.*

- c. *Shallow Wells.* Drilling of wells where the Bottom Hole is less than approximately 3,500 feet deep (hereinafter "Shallow Wells") and above the zones identified in 1(b) as mid-zones, shall be located away from Developed Areas (as defined in the CSD) and shall be identified in the Annual Drilling Plan. Drilling of Shallow Wells may proceed pursuant to said drilling plan after the County approves the portion of the Annual Drilling Plan related to Shallow Wells as set forth in the CSD.
- d. *Supplement Review.* Upon receipt, the County shall promptly forward the Drilling Plan Supplements ("Supplements" defined to be a Deep Zone Supplement, a Mid-Zone Supplement, or both) filed by PXP to the Community Advisory Panel ("CAP") established pursuant to the CSD for its review and comment. The County will allow the CAP or CAP members two weeks from the date the County provided Supplements to the CAP to provide their written comments on the Supplement to the County. The County may review and approve the Annual Drilling Plan and related Supplements in phases consistent with the terms herein, but shall conduct its review of the Annual Drilling Plan and Mid-Zone Supplement within 45 calendar days after their submission to the County and either approve the Supplement or provide PXP with a list of deficiencies within that 45-day timeframe as set forth in the CSD. The Drilling Plan Supplements will only include the study referenced in 1(a) and other relevant or required information related to the location of proposed wells. The County shall conduct its review of the Deep Zone Supplement within 45 calendar days after its submission and either approve the Supplement or provide PXP with a list of deficiencies within that 45-day timeframe after considering any timely CAP comments concerning the Deep Zone Supplement. The County will not delay its review of the Annual Drilling Plan or any supplements thereto. PXP may drill any wells approved under the Annual Drilling Plan regardless of the status of the County's review of the Supplements. Similarly, PXP may drill any wells approved under a Supplement regardless of the status of the Annual Drilling Plan review and approval. Changes to well pad locations that result from review of the Supplements will not require resubmittal of the Annual Plan or delay any drilling under the Annual Plan, beyond the time necessary to implement such changes.
- e. *Definitions.* "Top Hole" shall mean the surface location from which drilling is commenced. "Bottom Hole" shall mean the underground location at which drilling terminates. "Slant Drilling" shall mean non-vertical drilling, directional drilling, or drilling at a relatively significant angle. "Sensitive Developed Area" shall mean a lot or parcel that contains a single or multi-family residence, existing park, school or health care facility.
- f. *Environmental Consideration.* The County shall lessen or disapprove any otherwise required Slant Drilling if more remote drilling would result in more significant adverse environmental impacts on balance and the County shall consider any timely comments by the CAP assessing this balance.
- g. *Non-interference.* This paragraph 1 of the Settlement Agreement shall be construed in connection with the entire CSD. Except as expressly set forth above, this paragraph shall not be construed to interfere with PXP's business in the Oil Field.

Section 2: Noise

- a. The CSD currently provides that hourly, A-weighted equivalent noise levels associated with drilling, re-drilling and reworking wells shall not elevate baseline levels (which shall not include drilling, re-drilling or reworking operations) by more than five A-weighted decibels ("dBA") at the Oil Field boundary of any Developed Area. Instead of the referenced five dB A provision, PXP shall limit the night time (10 p.m. to 7 a.m.) noise levels at Developed Areas to no more than three dBA above a one-hour baseline average for the defined nighttime period, but at no time will PXP be required to maintain noise levels below the baseline nighttime noise levels. Furthermore, PXP and the County determined the baseline noise levels at four additional Oil Field boundary locations near Developed Areas, selected by PXP and the County, in addition to the seven utilized in the EIR for a total of 11

locations. If PXP violates the above noise requirements, no new drilling or re-drilling permits shall be issued by the County until PXP, in consultation with the County, identifies the source of the noise and PXP takes steps necessary to assure compliance with the above-specified threshold.

- b. If drilling, re-drilling or reworking operations elevate nighttime baseline noise levels by more than 10dBA for more than 15 minutes in any one hour as independently verified and determined by the County, PXP, in consultation with the County, shall identify the cause and source of the noise and take steps to avoid such extended periods of noise elevation in the future. This provision does not negate the CSD noise limits between 7 a.m. to 10 p.m.

Section 3: Number of Drill Rigs. Notwithstanding the CSD's allowance for operation of a maximum of three drill rigs at any one time on the Oil Field, FM O&G shall limit to two the number of drill rigs in use at any one time.

Section 4: Number of wells. Notwithstanding the aggregate and annual well-drilling limits in the CSD, PXP shall comply with the following limits:

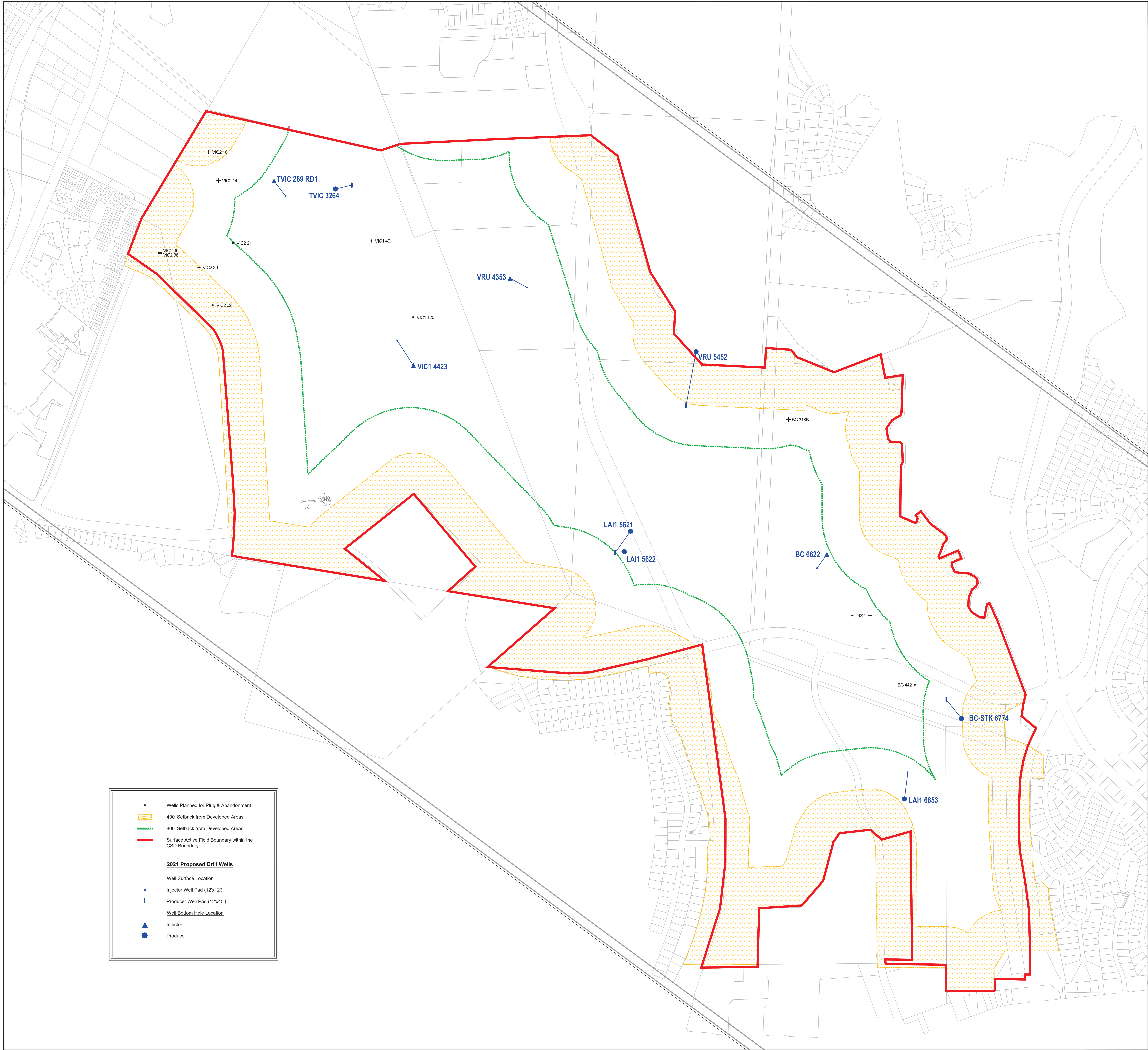
- a. Notwithstanding Section 22.310.080 (formerly section 22.44.142.H) of the CSD, no more than 500 new wells (inclusive of Bonus Wells and wells drilled since approval of CSD) shall be drilled pursuant to the CSD (hereinafter "Director's Review") through October 1, 2028, or during the remaining life of the CSD, whichever is later.
- b. Until such time as PXP has drilled or re-drilled 50 wells since the adoption of the CSD, or 24 months from the date of this Agreement, whichever is sooner ("Time Period One"), no more than 30 wells may be drilled or re-drilled in any calendar year pursuant to a Director's Review as set forth in the CSD (hereinafter Director's Review). At the end of Time Period One, and if the County determines, pursuant to its review of the CSD by the Director of Regional Planning, that the CSD has been effective in protecting the health, safety, and general welfare of the public, thereafter (the "Full Operational Period") no more than 35 wells may be drilled or re-drilled in the calendar year pursuant to Director's Review.
- c. In Time Period One, for each well abandoned within 800 feet of any Developed Area (the "800-foot zone") by PXP since adoption of the CSD and in full compliance with the California Department of Conservation's Division of Oil, Gas and Geothermal Resources ("DOGGR") standards for abandonment at the time of abandonment, PXP may drill two additional new wells outside of the 800-foot zone (hereinafter "Bonus Wells"), up to a maximum of 45 drilled and re-drilled wells (30 wells plus 15 Bonus Wells) in any calendar year within Time Period One pursuant to Director's Review and subject to review and approval in the Annual Drilling Plan. Subject to the annual and aggregate limits on number of wells, Bonus Wells earned by abandonment may be drilled at any time during the life of the CSD.
- d. In the Full Operational Period, for each well abandoned within the 800-foot zone, FM O&G may drill two additional new wells outside the 800-foot zone up to a maximum of 53 drilled and re-drilled wells (35 wells plus 18 Bonus Wells) in that year pursuant to Director's Review and subject to review and approval in the Annual Drilling Plan. Subject to the aggregate and annual limits on number of wells, Bonus Wells earned by abandonment may be drilled at any time during the life of the CSD.
- e. The Developed Area as used in the CSD with respect to the 400-foot buffer zone (Section 22.310.050) (formerly section 22.44.142.E) shall remain unchanged (static or fixed) from what it was determined to be on the effective date of the CSD.

Section 6: Clean Technology Assessment. The CSD requires PXP to consider proven reasonable and feasible technological improvements which are capable of reducing the environmental impacts of drilling and re-drilling. (County Code section 22.310.050.Z.6)

(formerly section 22.44.142.E.26.f) The CSD also requires that the Annual Drilling Plan include a discussion of the latest equipment and techniques that are proposed for use as part of its drilling and re-drilling program to reduce environmental impacts. (County Code 22.310.050.Z.3.h) (formerly County Code section 22.44.142.E.26.c.ix) Pursuant thereto, PXP shall address in each Annual Drilling Plan the availability and feasibility of the use of natural gas-powered drill rigs or other technology capable of reducing environmental impacts, for the drilling of wells proposed in the Annual Drilling Plan (collectively "Clean Technology"). During the Periodic Review provided in 22.310.070.G (formerly 22.44.142.G.7), the County will evaluate such technology for brand new equipment that PXP intends to lease, acquire or otherwise use and require PXP to implement such technology to the extent the technology is feasible and available on a commercially reasonable basis.

Section 10: Well Plugs. *DOGGR requires oil field operators to utilize a minimum 25-foot cement surface plug at the top of a well when abandoning any such well pursuant to Title 14 of the California Code of Regulations section 1723.5. To augment this requirement, for all wells abandoned at the Oil Field from the date of this Agreement, PXP shall utilize a total of 150-foot cement surface plug.*

C22

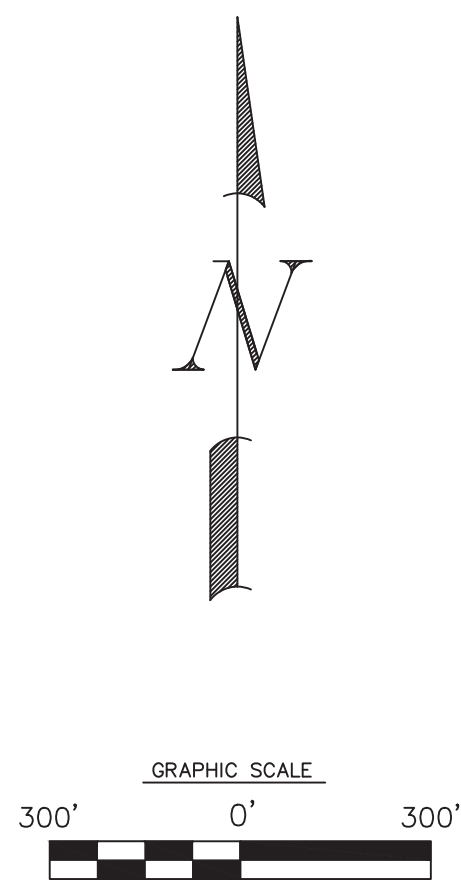



2021 Drilling & Re-drilling Plan Wells		
COUNT	TYPE	WELL NAME
1	PRODUCER	BC-STK 6774
2	INJECTOR	BC 6622
3	INJECTOR	VRU 4353
4	PRODUCER	VRU 5452
5	PRODUCER	LAI1 5621
6	PRODUCER	LAI1 5622
7	PRODUCER	LAI1 5622
8	INJECTOR	TVIC 269RD1
9	PRODUCER	TVIC 3264
10	INJECTOR	VIC1 4423

2021 Planned Plug and Abandonments	
COUNT	WELL NAME
1	BC 332
2	BC 442
3	BC 318B
4	VIC2 30
5	VIC2 32
6	VIC2 36
7	VIC2 35
8	VIC1 49
9	VIC1 120
10	VIC2 14RD
11	VIC2 16
12	VIC2 21

Oak Tree Inventory		
Oak Tree #	# of Trunks	Cum DBH
1	1	10.0000
2	1	6.00
3	1	5.40
4	1	7.60
5	1	7.90
6	2	13.10
7	1	7.20

Oak Tree Location





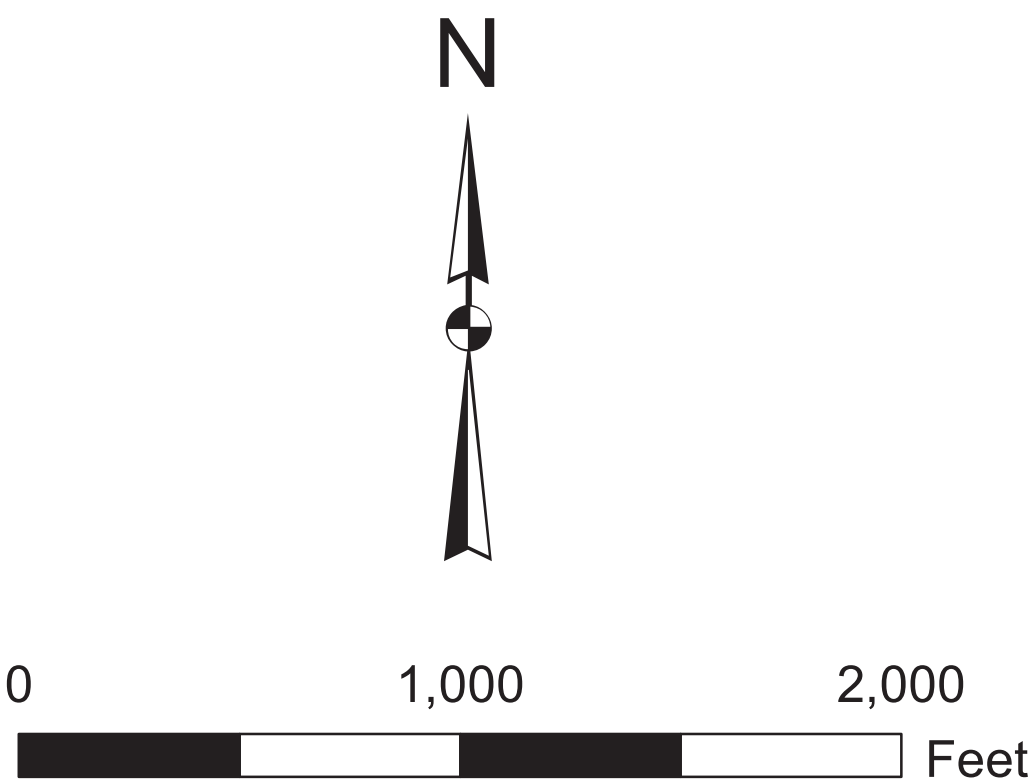
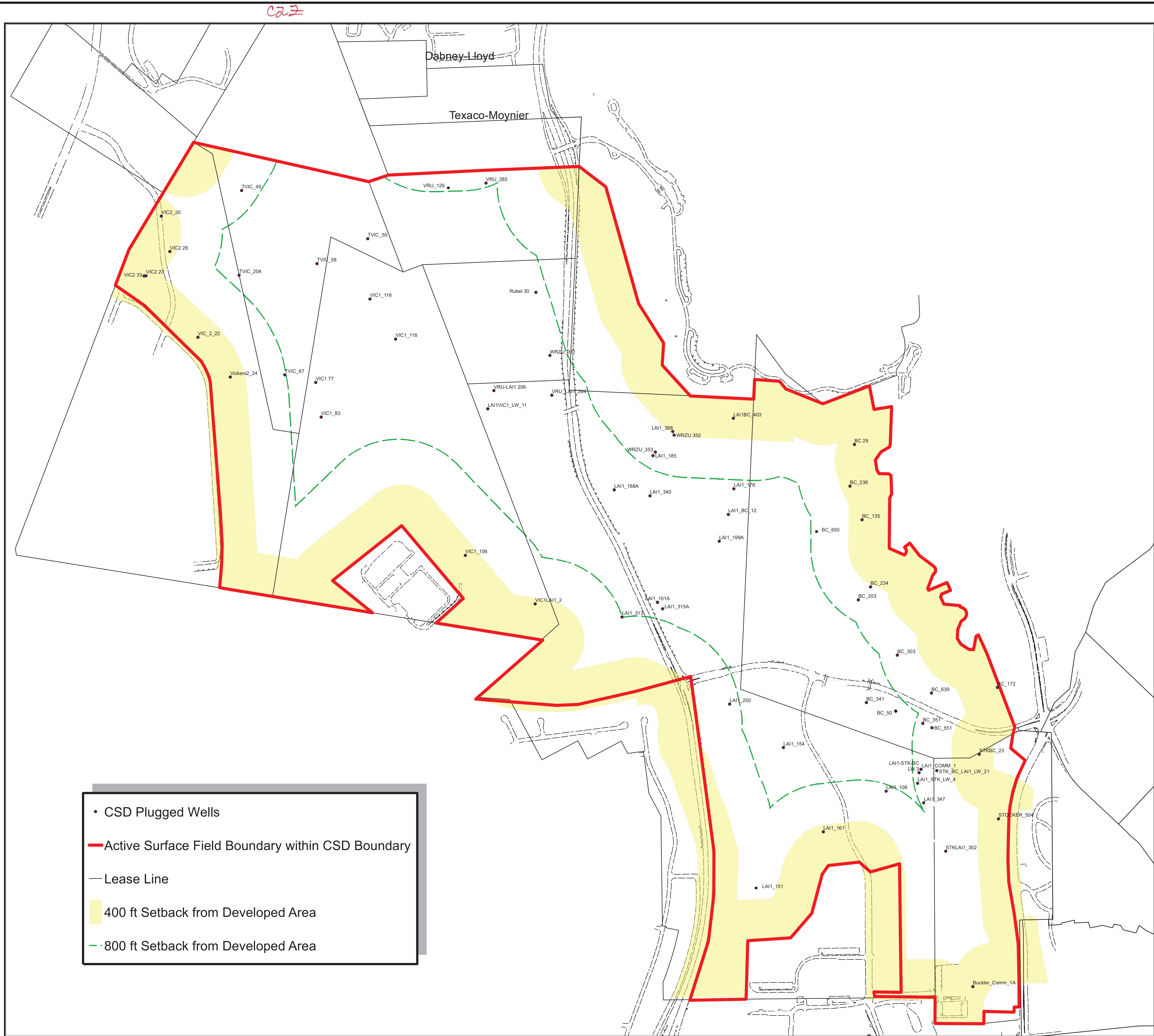
Sentinel Peak Resources
5640 S. Fairfax Ave.
Los Angeles, CA 90056

INGLEWOOD OIL FIELD
LOS ANGELES COUNTY, CALIFORNIA

2021 Drilling, Re-drilling and
Well Abandonment Map

DATE: 11-4-2020

SCALE: SEE SCALE BAR
Coordinate System: NAD 1927, CA PLANE, ZONE 7



Count	Well	Within 800 FT of Developed Areas
1	BC 135	Yes
2	BC 172	Yes
3	BC 203	Yes
4	BC 234	Yes
5	BC 236	Yes
6	BC 303	Yes
7	BC 351	Yes
8	BC 551	Yes
9	BC 639	Yes
10	Buckler-Comm 1A	Yes
11	LAI1 106	Yes
12	LAI1 161	Yes
13	LAI1 185	Yes
14	LAI1 250	Yes
15	LAI1 313	Yes
16	LAI1 347	Yes
17	LAI1 368	Yes
18	LAI1-COMM 1	Yes
19	LAI1-STK-LW 4	Yes
20	LAI1-BC 403	Yes
21	STK-BC-LAI1-LW 21	Yes
22	STK-BC 23	Yes
23	STK-LAI1 302	Yes
24	STOCKER 504	Yes
25	TVIC 49	Yes
26	TVIC 67	Yes
27	VIC2 22	Yes
28	VIC1 106	Yes
29	VIC1-LAI1 2	Yes
30	VIC2 20	Yes
31	VICKERS2 24	Yes
32	WRZU 353	Yes
33	VRU 285	Yes
34	LAI1-STK-BC-LW 3	Yes
35	VIC2 23	Yes
36	BC 341	No
37	LAI1 101A	No
38	LAI1 154	No
39	LAI1 188A	No
40	LAI1 199A	No
41	LAI1 315A	No
42	LAI1 340	No
43	LAI1-BC 12	No
44	LAI1-VIC1-LW 11	No
45	TVIC 204	No
46	TVIC 50	No
47	TVIC 58	No
48	VIC1 116	No
49	VIC1 118	No
50	VIC1 83	No
51	VRU-LAI1 204	No
52	WRZU 311	No
53	LAI1 176	No
54	VIC2 28	Yes
55	BC 29	Yes
56	VIC2 33	Yes
57	VIC1 77	No
58	VRU-LAI1 206	No
59	WRZU 352	Yes
60	Rubel 30	No
61	VRU 129	Yes
62	BC 50	No
63	LAI1 151	Yes



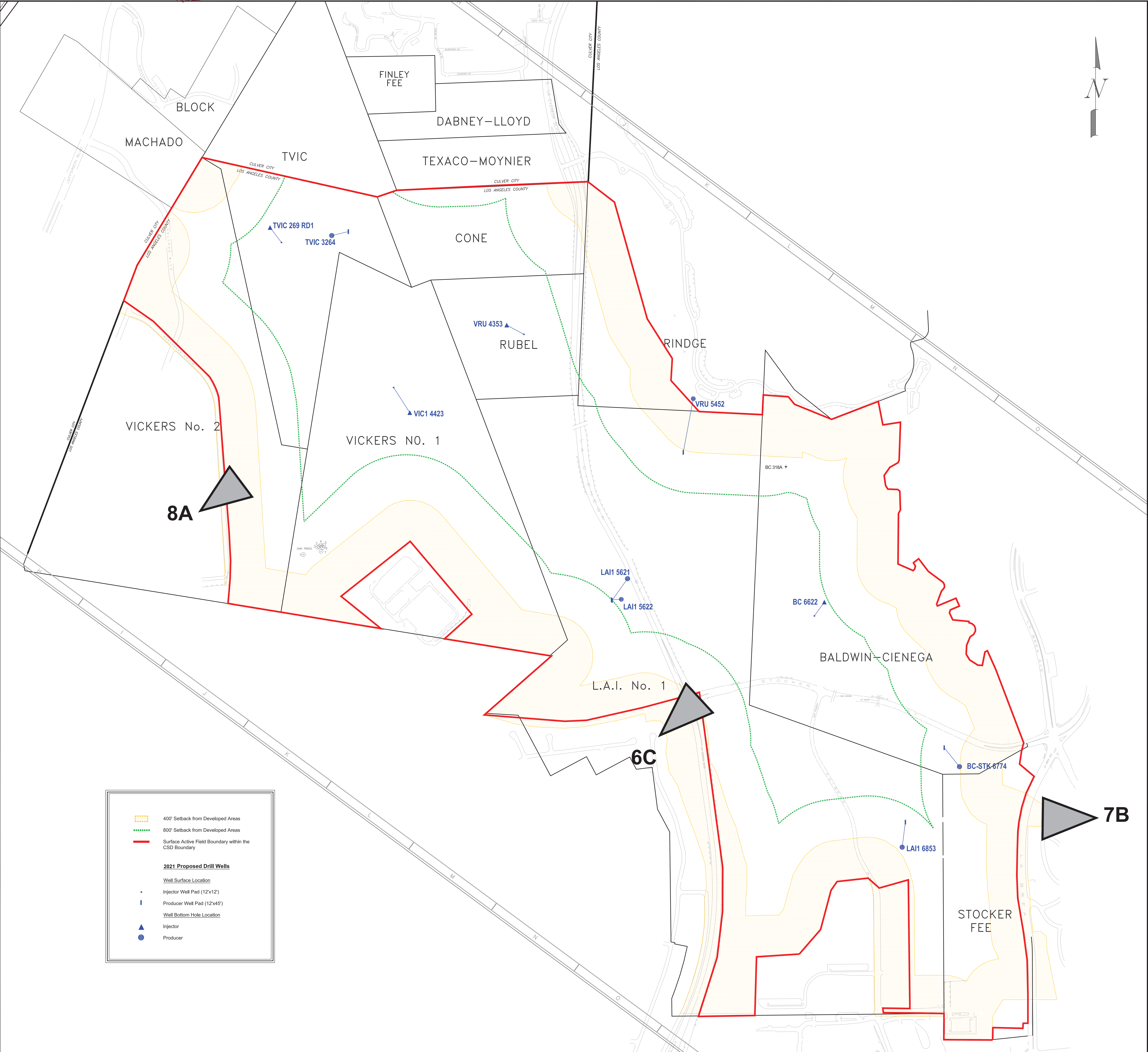
LOS ANGELES COUNTY, CALIFORNIA
INGLEWOOD OIL FIELD

Attachment #2

2021 CSD Plugged and Abandoned Wells
(as of October 30, 2020)

Drawn by: SP

Date: 11/4/2020



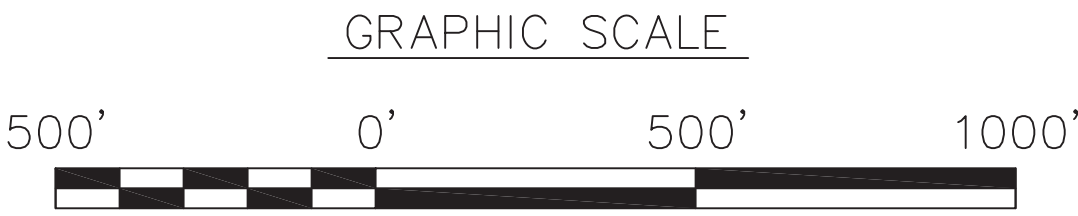
Environmental Assessment Viewshed Analysis

- 7B** View of the Inglewood Oil Field from Windsor Hills
- 6C** View of the Inglewood Oil Field from Ladera Heights
- 8A** View of the Inglewood Oil Field from West Los Angeles College

2021 Drilling & Re-drilling Plan Wells		
COUNT	TYPE	WELL NAME
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2	INJECTOR	BC 6622
3	INJECTOR	VRU 4353
4	PRODUCER	VRU 5452
5	PRODUCER	LAI1 5621
6	PRODUCER	LAI1 6853
7	PRODUCER	LAI1 5622
8	INJECTOR	TVIC 269RD1
9	PRODUCER	TVIC 3264
10	INJECTOR	VIC1 4423

Oak Tree Inventory		
Oak Tree #	# of Trunks	Cum. DBH
1	1	10.0000
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Oak Tree Location



Sentinel Peak Resources
5640 S. Fairfax Ave.
Los Angeles, CA 90056

INGLEWOOD OIL FIELD
LOS ANGELES COUNTY, CALIFORNIA

Attachment #3
2021 Visual Simulation Location Map

SCALE: SEE SCALE BAR

DATE: 10-21-2020 NAD 1927, CA PLANE, ZONE 7

C22

TVIC 269RD1



Black Text - Proposed production well as included in the 2021 Drilling

Plan Blue Text - Proposed injection well as included in the 2021

Drilling Plan

3.1 View of the Inglewood Oil Field from West Los Angeles College

C22

LAI1 6853

LAI1 5622
LAI1 5621



Black Text - Proposed production well as included in the 2021 Drilling

Plan Blue Text - Proposed injection well as included in the 2021

Drilling Plan

3.2 View of the Inglewood Oil Field from Windsor Hills

C22

LAI1 5621

VRU 5452

BC 6622



Black Text - Proposed production well as included in the 2021 Drilling
Plan BlueText - Proposed injection well as included in the 2021
Drilling Plan
3.3 View of the Inglewood Oil Field from Ladera Heights