

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

2. TYPE OF WELL
OIL WELL ☒ GAS WELL ☐ OTHER ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☐

3. NAME OF OPERATOR
Northern Minerals, Inc.

4. ADDRESS OF OPERATOR
P. O. Box 2182, Santa Fe, New Mexico 87501

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface
360' FEL and 360' FNL of Section 24.
At proposed prod. zone

6. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
11 miles southwest of Hospah, New Mexico

7. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)
360'

8. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
42'

9. ELEVATIONS (Show whether DF, RT, GR, etc.)
7163' G. L.

10. LEASE DESIGNATION AND SERIAL NO.
NM 12201

11. IF INDIAN, ALLOTTEE OR TRIBE NAME

12. UNIT AGREEMENT NAME

13. FARM OR LEASE NAME
Marcelina

14. WELL NO.
2

15. FIELD AND POOL, OR WILDCAT
Wildcat *CALLY*

16. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 24, T16N, R10W, N42M

17. COUNTY OR PARISH
McKinley

18. STATE
New Mexico

19. NO. OF ACRES IN LEASE
320

20. NO. OF ACRES ASSIGNED TO THIS WELL
40

21. ROTARY OR CABLE TOOLS
Rotary

22. APPROX. DATE WORK WILL START*
Upon Approval

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-5/8"	7"	20 lb.	30'	Suff. to Circulate
6-1/4"	4 1/2"	9 lb.	875'	Suff. to cover 500' above Hospah sand.

This will be an 875' Hospah sand wildcat to test shows of oil indicated during drilling of No. 1 Marcelina 330' FNL and 330' FEL of Section 24. This well was completed as a producer from the Dakota "A" sand at about 1750'. Cores will be taken of the Hospah and logs run. If commercial production of oil or gas is indicated, casing will be run and the well treated as necessary to establish production.

OCT 1 1975

U. S. GEOLOGICAL SURVEY

1. ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

2. SIGNED Lloyd Davidson TITLE President DATE 9-29-75
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:*OK*

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-55

All distances must be from the outer boundaries of the Section.

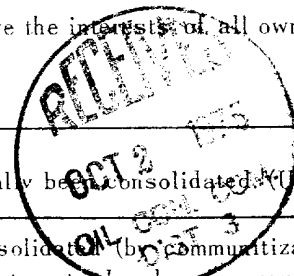
Owner Northern Minerals			Lease Marcelina		Well No. #2
Unit Letter A	Section 24	Township 16 North	Range 10 West	County McKinley	
Actual Footage Location of Well: 360 feet from the North line and 360 feet from the East line					
Ground Level Elev. 7163	Producing Formation Wildcat Gallup		Pool WILDCAT	Dedicated Acreage: 40 (JOINT) Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes" type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



<div style="text-align: right;"> ***** 360 ***** Marcelina No. 2 ***** ***** </div>		<div style="text-align: right;"> ***** 360 ***** </div>	
		<div style="text-align: right;"> ***** 360 ***** </div>	
<div style="text-align: center;"> Sec. 24, T.16N., R.10W </div>			

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Lloyd Davidson
Name

Lloyd Davidson

Position
President

Company
Northern Minerals, Inc.

Date
9-30-75

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

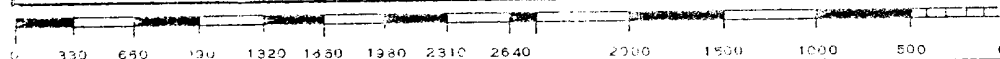
Date Surveyed
Sept. 25, 1975

Registered Professional Engineer and/or Land Surveyor

W. D. Williams

Certificate No.

2031



DEVELOPMENT PLAN FOR SURFACE USE

To be attached to Application to Drill a test well for oil or gas to be located 330' FNL and 330' FEL section 24, T16N-R10W, McKinley County, New Mexico. The Federal lease number is NM 12201. The well is to be known as Northern Minerals, Inc., No. 2 Marcelina.

This well will be drilled by a light-weight, truck-mounted Pailing 1500 type rig.

1. Existing roads including location of the exit from the main highway.

Accompanying this statement is a copy of USGS topographic map, herein called Map 1. The locatable reference point is the Albers Ranch Headquarters, approximately $11\frac{1}{2}$ miles southwest of Hospah, New Mexico, on the Borrego Pass - Hospah road. This is the main access road and is shown on the map. The point of exit from this road is $\frac{1}{2}$ mile northeast of the Albers Headquarters and is indicated on this map. A red line shows the direction to the well location. Also shown on the map are all existing roads within a three mile radius.

2. Planned access roads.

No new road construction is contemplated. If necessary, some low places in the vicinity of the well may have to be graded.

3. Location of existing wells.

Map 1 shows the location of the proposed well and all wells within a two mile radius.

4. Lateral roads to well location.

Covered in reply to (1) above.

5. Location of tank batteries and flow lines.

The tank battery will be located some 50 feet northeast of the well and is shown on Map 2. Also shown is flow line from well to tanks.

6. Location and Type of Water.

Water for drilling operations will be taken from the Tesoro Petroleum pond at Hospah. Trucks will haul water to the well. No water lines will be needed.

7. Methods for Handling Waste Disposal.

Upon completion of the well, all waste material will be placed in the pit, covered over and buried. See map 2.

8. Location of Camps.

There will be no camp. Crews will travel daily back and forth to Grants, New Mexico.

9. Location of Airstrips.

No airstrip will be constructed.

10. Location of Layout to Include Position of the Rig, Mud Tanks, Reserve Pits, Burn Pits, Pipe Rack, etc.

See map 2. The topography in the immediate vicinity of the well is flat. The drilling pad will not be compacted or surfaced.

11. Plans for Restoration of the Surface.

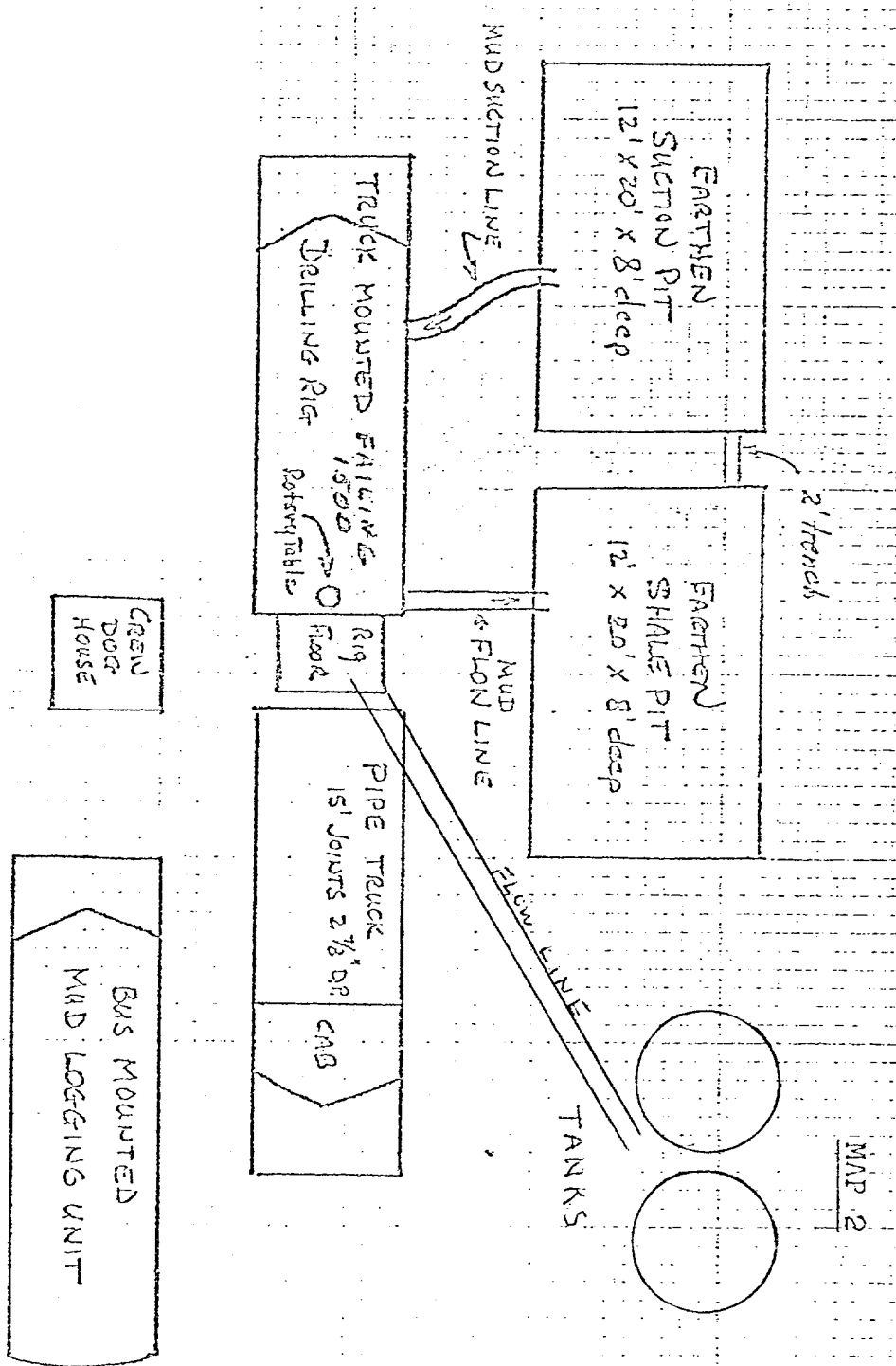
Upon completion of operations, the surface will be cleared of all junk, leveled and re-seeded.

12. Other Information.

The topography of the general area is gently rolling. There is some grass but very little other vegetation. No cut and fill will be needed.

Northern Minerals, Inc.

By: Lloyd Davidson
Lloyd Davidson, President



MAP 2

SCALE 1" = 10'

F

Oct. 2, 1975

30-031-20461

F. Loc. 340/N; 360/E

Elev. 7163 GL

Spd.

Comp.

TD

PB

Casing S.

W

Sx.

Int.

S

W

Sx.

Pr.

@

W

Sx.

T.

S

Csg. Perf.

Prod. Stim.

T
R
A
N
S

BO/D

I.P.

MCF/D After

Hrs.

SICP

PSI After

Days GOR

Grav.

1st Del.

S

TOPS

NITD

X

Well Log

TEST DATA

Kirtland

C-103

Plot

X

Schd.

PC

Q

PW

PD

D

Ref. No.

Fruitland

C-104

Electric Log

Pictured Cliffs

C-122

Cliff House

Ditr

Dfa

Menefee

Datr

Dac

Point Lookout

Mancos

Gallup

Sanostee

Greenhorn

Dakota

Morrison

Entrada

Joining

10

P
O
O
I

Gal. Co. No. 10

TLSW

RICW

U.A.

Oper.

for

thermo

Minerals, Inc.

Lse.

Marcelina

No.

2

Submit 5 Copies
Appropriate District Office
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-104
Revised 1-1-89
See Instructions
at Bottom of Page

REQUEST FOR ALLOWABLE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

Operator NERDLIHC COMPANY, INC.	Well API No.
Address 337 E. SAN ANTONIO DRIVE, LONG BEACH, CALIFORNIA 90807	
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)	
New Well <input type="checkbox"/>	Change in Transporter of:
Recompletion <input type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Change in Operator <input checked="" type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>
If change of operator give name and address of previous operator DEVCON OPERATIONS COMPANY, INC., 1801 BROADWAY, STE. 600, DENVER, CO 80202	

II. DESCRIPTION OF WELL AND LEASE

Lease Name Marcelina	Well No. 5	Pool Name, including Formation Marcelina/Dakota	Kind of Lease State, Federal or Fee	Lease No. NM-12201
Location Unit Letter A : 990 Feet From The N Line and 330 Feet From The E Line Section 24 Township 16N Range 10W , NMPM , McKinley County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> PERMIAN CORPORATION	Address (Give address to which approved copy of this form is to be sent) P. O. BOX 11831, HOUSTON, TX 77001	
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/> NONE	Address (Give address to which approved copy of this form is to be sent)	
If well produces oil or liquids, give location of tanks.	Unit A	Sec. 24
	Twp. 16N	Rge. 10W
	Is gas actually connected? NO	When ?

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v	Diff Res'v
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.B.T.D.			
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth			
Perforations					Depth Casing Shoe			
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank	Date of Test	Casing Pressure	Choke Size
Length of Test	Tubing Pressure		
Actual Prod. During Test	Oil - Bbls.	Well Bbls.	Gas - MCF

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

NERDLIHC COMPANY, INC.

By: Tom E. Knowlton
Signature
TOM E. KNOWLTON PRESIDENT
Printed Name
6/15/90 (213) 422-1271
Date Telephone No.

OIL CONSERVATION DIVISION

Date Approved **JUN 22 1990**
By: Brian J. Smith
SUPERVISOR DISTRICT #3
Title

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.

RECEIVED
JUL 4 1966
OIL CONT. DIV.
DIST. 3

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

the 1990s, the number of people in the world who are undernourished has declined from 760 million to 600 million. The number of people who are malnourished has declined from 1.1 billion to 800 million. The number of people who are obese has increased from 100 million to 300 million. The number of people who are overweight has increased from 100 million to 300 million. The number of people who are obese and overweight has increased from 100 million to 300 million. The number of people who are obese and overweight has increased from 100 million to 300 million.